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SGI Power Challenge and HiPPI Replacement for the ECS Project

White Paper

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Abstract

This document contains information about the SGI Power Challenge and HiPPI replacement. It provides instructions on how to consolidate the ACG and ICG functionality onto one host including the movement of databases from one host to another.

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Contents

Abstract

1. Introduction

1.1	Purpose.....	1-1
1.2	Organization.....	1-1
1.3	Review and Approval	1-2

2. Overview

2.1	Overview.....	2-1
2.1.1	SGI Power Challenge Replacement.....	2-1
2.1.2	HiPPI Replacement.....	2-1

3. SGI Power Challenge Replacement Details

3.1	GSFC SGI Power Challenge Replacement Details	3-1
3.2	LPDAAC SCI Power Challenge Replacement Details.....	3-1
3.3	LaRC SGI Power Challenge Replacement Details.....	3-2
3.4	NSIDC SGI Power Challenge Replacement Details	3-2
3.5	PVC SGI Power Challenge Replacement Details.....	3-3
3.6	VATC SGI Power Challenge Replacement Details.....	3-4

4. HiPPI Replacement Details

5. GSFC SGI Power Challenge/HiPPI Replacement Procedures

5.1	SGI Power Challenge Replacement Procedures	5-1
5.2	HiPPI Replacement Procedures	5-1

6. LPDAAC SGI Power Challenge/HiPPI Replacement Procedures

6.1	SGI Power Challenge Replacement Procedures	6-1
6.2	HiPPI Replacement Procedures	6-2

7. LaRC SGI Power Challenge/HiPPI Replacement Procedures

7.1	SGI Power Challenge Replacement Procedures	7-1
7.1.1	ACG-ICG Consolidation	7-1
7.1.2	LaRC Rollback Plan	7-8
7.1.3	SPG Configuration.....	7-8
7.2	HiPPI Replacement Procedures	7-9

8. NSIDC SGI Power Challenge/HiPPI Replacement Procedures

8.1	SGI Power Challenge Replacement Procedures	8-1
8.1.1	NSIDC ACG-ICG Consolidation	8-2
8.1.2	DRG Relocation.....	8-7
8.2	HiPPI Replacement Procedures	8-9

9. PVC SGI Power Challenge/HiPPI Replacement Procedures

9.1	SGI Power Challenge Replacement Procedures	9-1
9.2	HiPPI Replacement Procedures	9-1

10. VATC SGI Power Challenge/HiPPI Replacement Procedures

10.1	SGI Power Challenge Replacement Procedures	10-1
10.1.1	VATC ACG-ICG Consolidation.....	10-1
10.1.2	VATC Rollback Plan	10-3
10.2	HiPPI Replacement Procedures	10-4

Appendix A. ACG/DRG Transition Procedures

Appendix B. Sybase Transition Procedures

Appendix C. ICG to ACG Script

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1. Introduction

1.1 Purpose

The SGI Power Challenge replacement effort is across all DAACs, the PVC, the VATC and development. The SGI Power Challenge replacement is either a direct replacement of the challenge server with an equivalent capacity SGI Origin 300 server or consolidating functionality onto an Origin class server. ICG functionality is consolidated with ACG functionality at LDAAC, NDAAC, and the VATC. WKG functionality is moved to a DRG platform at LP DAAC, the PVC and the VATC. A single Origin 300 is replacing multiple Science Processors that are currently on SGI Power Challenge servers at LDAAC, LP DAAC and GDAAC with the equivalent capacity of the sum of individual Challenge hosts. All other Challenge replacements are on a one for one basis.

HiPPI Interface Replacement The current HiPPI interface is no longer supported. The HiPPI interface is moving to a private gigabit interface. This change is required at the four DAACs, the PVC and the VATC. In addition the SGI Challenge hosts do not support gigabit. This requires that the HiPPI replacement be coordinated with the SGI Challenge replacement effort.

1.2 Organization

This paper is organized as follows:

Section 1	Introduction
Section 2	Overview
Section 3	SGI Power Challenge Replacement Details
Section 4	HiPPI Replacement Details
Section 5	GSFC SGI Power Challenge/HiPPI Replacement Procedures
Section 6	LPDAAC SGI Power Challenge/HiPPI Replacement Procedures
Section 7	LaRC SGI Power Challenge/HiPPI Replacement Procedures
Section 8	NSIDC SGI Power Challenge/HiPPI Replacement Procedures
Section 9	PVC SGI Power Challenge/HiPPI Replacement Procedures
Section 10	VATC SGI Power Challenge/HiPPI Replacement Procedures

Appendix A Transition Procedures

Appendix B Sybase Configuration Procedures

1.3 Review and Approval

This White Paper is an informal document approved at the Office Manager level. It does not require formal Government review or approval; however, it is submitted with the intent that review and comments will be forthcoming.

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2. Overview

2.1 Overview

This transition of the SGI Power Challenge machines and HiPPI replacement is implemented due to the change in requirements. The support for the HiPPI switch configuration is no longer available. This requires changes in the current configurations, replacing the HiPPI interface switch with a Gigabit interface switch. This in turn requires the SGI Power Challenge machines to be removed from the baseline since the machines does not support the Gigabit interface. The following sub-sections give a high-level overview of what is being implemented on the ECS program.

2.1.1 SGI Power Challenge Replacement

The SGI Power Challenge replacement effort is across all DAACs, the PVC, the VATC and EDF. The SGI Power Challenge replacement is either a direct replacement of the challenge server, with an equivalent capacity SGI Origin 300 server or consolidating functionality onto an Origin class server. ICG functionality is consolidated with ACG functionality at LDAAC, NDAAC, the VATC and the EDF. WKG functionality is moving to a DRG platform at LP DAAC, the PVC and the VATC. A single Origin 300 is replacing multiple Science Processors that are currently Challenge servers at LDAAC, LP DAAC and GDAAC with the equivalent capacity of the sum of individual Challenge hosts. All other Challenge replacements are a one for one by using existing SGI platforms (i.e. NSIDC will be reusing the Origin 2000, current ICG host, for the DRG functionality).

2.1.2 HiPPI Replacement

The current HiPPI interface switch is no longer supported. The HiPPI interface switch configuration is moving to a private gigabit interface switch configuration. This change is required at the four DAACs, the PVC and the VATC. In addition, the SGI Challenge hosts do not support gigabit switch configuration. This requires that the HiPPI switch replacement be coordinated with the with the SGI Challenge replacement effort.

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3. SGI Power Challenge Replacement Details

3.1 GSFC SGI Power Challenge Replacement Details

The SGI Power Challenge replacement at GSFC is combining the g0spg01 and the g0spg07 SGI Power Challenges with g0spg01, a new SGI Origin 300 machine installed with IRIX 6.5.17 operating system. A new fiber channel RAID is added to the new g0spg01 machine. The new g0spg01 host is not part of the operational baseline at this time. It is used for evaluation of SP4M data types as a SSIT machine. This machine is configured with the IRIX 6.5.17 operating system. On g0spg10, the existing SCSI RAID is replaced with a new fiber channel RAID for SSIT. A new Origin 300 host is added along with TP9400 RAID as the new g0drg05 host connecting to the additional silo.

Challenge Replacement at GFSC

Current Host	Replacement Host	Comment
g0spg01 16x200 Mhz CPU, 2GB RAM, g0spg07 24x200 Mhz CPU, 2 GB RAM	g0spg01 16x600 Mhz CPU, 16 GB RAM	Science Processor SCSI RAID is also being replaced with fiber channel RAID 14x146 g0spg10, 14x146 g0spg15. This is TP 9500 RAID
	g0drg05 4x600 Mhz CPU, 4 GB RAM	New Silo 5 server, not part of challenge replacement but shown for completeness There is a new RAID 78x36 (TP9400)

3.2 LPDAAC SGI Power Challenge Replacement Details

The SGI Power Challenge replacement at LPDAAC is combining the e0spg01 and the e0spg05 SGI Power Challenges into e0spg11, a new SGI Origin 300 machine. The e0wkg01 SGI Power Challenge machine is removed and the functionality is transferred to the e0drg11 machine will addition RAM added.

Challenge Replacement at LP DAAC

Current Host	Replacement Host with CPUs and Memory	Comment
e0spg01 & e0spg05 24x200 Mhz CPU, 10 GB RAM	e0spg11 8x600 Mhz CPU, 10 GB RAM	
e0wkg01 8x200 Mhz CPU, 8 GB RAM	e0drg11 8x300 Mhz CPU, 12 GB RAM	Additional 8 GB RAM to bring e0drg11 total; to 12 GB

3.3 LaRC SGI Power Challenge Replacement Details

The SGI Power Challenge replacement at LaRC is combining the l0spg01, l0spg05, and l0spg06 SGI Power Challenges into l0spg11, a new SGI Origin 300 machine. The l0icg01 SGI Power Challenge machine is removed and the Ingest functionality is consolidated onto the existing l0acg02 SGI Origin machine. The user database for Sybase is moved to the RAID attached to the l0acg02 SGI Origin. Additional RAID, CPU's, and memory is added to l0acg02 to support the ICL functionality.

Challenge Replacement at LaRC

Current Host	Replacement Host	Comment
l0spg01, l0spg05, l0spg06 48x200 Mhz CPU, 18 GB RAM	l0spg11 16x400 Mhz CPU, 16 GB RAM	
l0icg01 6x200 Mhz CPU, 2 GB RAM, l0acg02 8 CPU, 8 CPU	l0acg02 16 CPU, 16 GB RAM	Added 4x600 Mhz CPU, 4 GB RAM P-brick, 10x36 GB RAID

3.4 NSIDC SGI Power Challenge Replacement Details

The SGI Power Challenge replacement at NSIDC is replacing the n0icg01 and n0acg01 hosts with a SGI Origin 300 machine (installed with IRIX 6.5.17 OS) with a new fiber channel RAID. The additional RAM is added to the current n0icg01 host, SGI Origin 2000 machine, and is replacing the n0drg01 SGI Power Challenge machine. The n0spg03 SGI Power Challenge is replaced with a new SGI Origin Fuel machine (installed with IRIX 6.5.17 OS). The ACG/ICG consolidation configuration was designed by calculating the current number of CPU's cycles on the ACG and ICG Challenge hosts and adjusting it by observing the workload over a number of weeks. Then adding a margin for peak activity and an additional margin for future growth. The configuration being delivered for the ACG/ICG host meets the design goal for operational loads.

Challenge Replacement at NSIDC

Current Host	Replacement Host	Comment
n0drg01 8x200 Mhz CPU, 2 GB RAM	n0drg01 4x400 Mhz CPU, 4 GB RAM	Origin 2000 n0icg01 becomes n0drg01 2 GB RAM added
n0icg01 4x400 Mhz CPU, 2 GB RAM n0acg01 8x200 Mhz 4 GB RAM	n0acg01 8x600 Mhz CPU, 14 GB RAM	The SCSI RAID associated with n0icg01 and n0acg01 will be replaced with fiber channel RAID at the same time as the servers. 28x36 (Sybase) and 14x146 TP9500 RAID
n0spg03 2x200 Mhz CPU, 0.5GB RAM	n0spg03 1x600 Mhz CPU, 2 GB RAM	This is an Origin Fuel not an Origin 300

3.5 PVC SGI Power Challenge Replacement Details

The SGI Power Challenge replacement in the PVC is replacing the p0spg01 SGI Power Challenge with a new SGI Origin 300 machine. The functionality of the p0wkg01 SGI Power Challenge is migrating onto the p0drg04 machine with additional RAM added. The p0icg01 and p0drg01 SGI Power Challenge machines is replaced with new SGI Origin 300 machines.

PVC Challenge Replacement

Current Host	Replacement Host	Comment
p0spg01 12x300 Mhz CPU, 3 GB RAM	p0spg01 6x600 Mhz CPU, 6 GB RAM	
p0wkg01 6x200 Mhz CPU, 6 GB RAM	p0drg04 8x300 Mhz CPU, 12 GB RAM	10 GB RAM Added
p0icg01 4x200 Mhz CPU, 2 GB RAM	p0icg01 4x600 Mhz CPU, 4 GB RAM	
p0drg01 8x200 Mhz CPU, 2 GB RAM	p0drg01 4x600 Mhz CPU, 4 GB RAM	

3.6 VATC SGI Power Challenge Replacement Details

The SGI Power Challenge replacement in the VATC is moving the t1wkg01 functionality to the t1drg03 with additional RAM added. The t1acg04 SGI (Origin machine) is replaced by a SGI

Origin 300 machine. The t1icg03 functionality is migrated to the t1acg04 SGI Origin machine along with the associated Ingest databases. The SGI Origin 2000 is transition into t1dig06.

VATC Challenge Replacement

Current Host	Replacement Host	Comment
t1wkg01 4x200 Mhz CPU, 4 GB RAM	t1drg03 3x300 Mhz CPU, 8.75 GB RAM	8 GB RAM Added
t1dpg06 4x200 Mhz CPU, 0.25 GB RAM	t1dpg06 4x300 Mhz CPU, 2 GB RAM	This is reuse of existing t1acg04. It is an Origin 2000
t1icg03 2x200 Mhz CPU, 1 GB RAM,	t1acg04 4x600 Mhz CPU, 4 GB RAM	

4. HiPPI Replacement Details

The current HiPPI interface switch configuration is no longer being supported. The HiPPI interface switch configuration is replaced by a private gigabit interface switch configuration. In order to have the gigabit interfaces to work, the SGI Power Challenge machines need to be replaced since they do not support the gigabit interface. In order to support the gigabit interface, new gigabit interface cards must be installed in the rest of the DAAC's platforms. A new Catalyst 3550 must be installed with new gigabit interface cables to all platforms. The majority of this work has already been completed at each DAAC.

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5. GSFC SGI Power Challenge/HiPPI Replacement Procedures

The procedures for the SGI Power Challenge and HiPPI replacement are separated into 2 different sub-sections. Section 5.1 contains the procedures for the SGI Power Challenge replacement and Section 5.2 contains the procedures for the HiPPI replacement and activation.

5.1 SGI Power Challenge Replacement Procedures

SGI Power Challenge Replacement has been completed therefore the procedures are not provided in this document. The summary of work that has been completed is as follows:

The SPG hosts (g0spg01 and g0spg07) are replaced with g0spg01 (a new Origin 300).

A new Origin 300 was added for g0drg05 host.

5.2 HiPPI Replacement Procedures

The HiPPI replacement procedures are written with the assumptions that the following work has already been completed:

1. Gigabit interface cables have been installed and waiting for connection to platforms.
2. The catalyst 3550 has been installed and waiting for connection.
3. The gigabit interface cards are installed in the platforms, and configured as eg1.
4. The SGI patch 5350 is installed.

The GSFC Host HiPPI Addresses document sent out by Randy Haynes of System Engineering is used to facilitate the HiPPI network replacement with the Gigabit network.

Due to the security of IP addresses, the GSFC Host HiPPI Addresses document is not published in this document. The procedures detailed in the GSFC Host HiPPI Addresses document include changing the IP address from HiPPI to Gigabit for all existing hosts and adding the new IP addresses for the new hosts. This is being accomplished by changing each <host_name>h /etc/hosts, /etc/hosts.allow files, and modifying DNS. Also, the SLCsocks5.conf and clientproxy.conf files have to be modified.

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6. LP DAAC SGI Power Challenge/HiPPI Replacement Procedures

The procedures for the SGI Power Challenge and HiPPI replacement are separated into 2 different sub-sections. Section 6.1 contains the procedures for the SGI Power Challenge replacement and Section 6.2 contains the procedures for the HiPPI replacement and activation.

6.1 SGI Power Challenge Replacement Procedures

1. Load New Origin from e0console1 per Baseline.
2. Configure e0spg11 on network w/o HiPPI.
3. Get Autosys Client license for e0spg11.
4. Copy over /data1 from e0spg01/e0spg05 to e0spg11.
5. Install Autosys on e0spg11, configure Server on e0sps04 to use e0spg11 as client.
6. Transfer all PDPS activity from e0spg05 to e0spg01 during transition.
7. Shutdown e0spg05 and remove RAID.
8. Attach RAID to e0spg11 and change ownership to e0spg11.
9. Set up NFS mounts similar to e0spg01 and e0spg05 but non-HiPPI.
10. Configure all other networked machine to mount e0spg11 instead of e0spg05.
11. Install Clear Case on e0spg11 and copy over any needed files, reload VOBS from RAID.
12. Test Autosys on e0spg11.
13. Install Custom Code on e0spg11.
14. Test PDPS Production on e0spg11.
15. Transfer all PDPS Production from e0spg01 to e0spg11.
16. Transfer all Clear Case VOBS from e0spg01 to e0spg11.
17. Transfer Cron Jobs over.
18. Change Firewall rules to redirect from e0spg01 to e0spg11 so the outside world doesn't need to change.
19. Shutdown e0spg01 and transfer RAID to e0spg11.
20. Combine RAID on e0spg11 into 1 large volume.

6.2 HiPPI Replacement Procedures

The HiPPI replacement procedures are written with the assumptions that the following work has already been completed:

1. Gigabit interface cables have been installed and waiting for connection to platforms.
2. The Catalyst 3550 has been installed and waiting for connection.
3. The gigabit interface cards are installed in the platforms.
4. The SGI Patch 5350 is installed.

The LP DAAC Host HiPPI Addresses document, sent out by Randy Haynes of System Engineering, is used to facilitate the HiPPI network replacement with the Gigabit network.

Due to the security of IP addresses, the LaRC Host HiPPI Addresses document is not published in this document. The procedures detailed in the LaRC Host HiPPI Addresses document includes changing the IP address from HiPPI to Gigabit for all existing hosts and adding the new IP addresses for the new hosts. This is accomplished by changing each <host_name>h /etc/hosts, /etc/hosts.allow files, and modifying DNS. Also, the SLCsocks5.conf and clientproxy.conf files have to be modified.

7. LaRC SGI Power Challenge/HiPPI Replacement Procedures

The procedures for the SGI Power Challenge and HiPPI replacement are separated into 2 different sub-sections. Section 7.1 contains the procedures for the SGI Power Challenge replacement and Section 7.2 contains the procedures for the HiPPI replacement and activation.

7.1 SGI Power Challenge Replacement Procedures

Before the ACG-ICG consolidation can be implemented, the ICG to ACG patch must be installed on all hosts.

7.1.1 ACG-ICG Consolidation

At LaRC, the code and databases from the existing ICG host are moved to the existing ACG host. The existing ACG host will need to be powered down for a short time in order to add the additional memory and CPUs that are being added. The addition of memory and CPUs must be completed before the transition of the ICG functionality to the ACG host. Currently LaRC is configured with 3 instances of FTP Server and Staging Disk Server, which resides on the ACG, ICG and DRG hosts. The baselined configuration after the completion of the consolidation will be 2 instances of FTP Server and Staging Disk Server on the ACG and DRG hosts.

Sybase Reconfiguration on l0acg02 host:

1. Disk init the new disk devices on l0acg02.
2. Create the following 9 databases on l0acg02.
 - EcCsNameServer
 - EcCsNameServer_TS1
 - EcCsNameServer_TS2
 - EcCsRegistry
 - EcCsRegistry_TS1
 - EcCsRegistry_TS2
 - Ingest
 - Ingest_TS1
 - Ingest_TS2
3. Setup the dboptions (select into) on those new databases.
4. Create dbo logins for css_role and ingest_role.
5. Change ownership of the databases listed in step 2 to reflect ownership to either css_role or ingest_role, depending on the database by using sp_changedbowner.

LARC ACG ASE Configuration Parameter Changes (for ICG/ACG transition)

Actual Values (Regular Font) vs. Baselined Values (in Bold Font)			ASE(12.5)
Server	Parameter Name	Default	LARC
acg	cpu grace time	500	1500
acg	event buffers per engine	100	2000
acg	event buffers per engine	100	2000
acg	max online engines	1	8
acg	max online engines	1	8
acg	max SQL text monitored	0	1024
acg	number of engines at startup	1	8
acg	number of devices	10	40
acg	number of devices	10	40
acg	number of locks	5000	205000
acg	number of locks	5000	205000
acg	number of open databases	12	40
acg	number of open indexes	500	2300
acg	number of open objects	500	7500
acg	number of remote connections	20	100
acg	number of remote logins	20	100
acg	number of user connections	25	1100
acg	number of user connections	25	1100
acg	number of worker processes	0	10
acg	o/s file descriptors	0	1000

Actual Values (Regular Font) vs. Baselined Values (in Bold Font)			ASE(12.5)
Server	Parameter Name	Default	LARC
acg	print deadlock information	0	1
acg	procedure cache size (12.x)	3271	500000
acg	procedure cache size (12.x)	3271	500000
acg	stack size	87040	
acg	max memory (12.x)	24576	3500000
acg	max memory (12.x)	47104	3500000

LaRC's Sybase Devices

➤ (1) NEW devices

```

> Iingest_data1          4096 /dev/rxlv/Iingest_data1
> Iingest_data2          4096 /dev/rxlv/Iingest_data2
> Iingest_log            4096 /dev/rxlv/Iingest_log
> Ireg_data_dev          4096 /dev/rxlv/Ireg_data_dev
> Iregistry_ops_log      1014 /dev/rxlv/Iregistry_ops_log
> Iregistry_ts1ts2_log   4096 /dev/rxlv/Iregistry_ts1ts2_log
>
> ****   III. Database Allocation      10acg02_srvr
>

```

➤ NEW databases to be added to Part III and IV of 920-TDL-009:

```

>
> NEW          Database Name          Device Name      Device Allocation
(M)
>
> EcCsNameServer      Ireg_data_dev      20
> EcCsNameServer      Iregistry_ops_log   10
> EcCsNameServer_TS1  Ireg_data_dev      20
> EcCsNameServer_TS1  Iregistry_ts1ts2_log 10
> EcCsNameServer_TS2  Ireg_data_dev      20
> EcCsNameServer_TS2  Iregistry_ts1ts2_log 10
>
> EcCsRegistry         Ireg_data_dev      300
> EcCsRegistry         Iregistry_ops_log   150
>
> EcCsRegistry_TS1     Ireg_data_dev      300
> EcCsRegistry_TS1     Iregistry_ts1ts2_log 150
>
> EcCsRegistry_TS2     Ireg_data_dev      300
> EcCsRegistry_TS2     Iregistry_ts1ts2_log 150
>
> Ingest               Iingest_data1      240

```

> Ingest	Iingest_data2	480
> Ingest	Iingest_log	240
>		
> Ingest_TS1	Iingest_data2	160
> Ingest_TS1	Iingest_data1	80
> Ingest_TS1	Iingest_log	80
>		
> Ingest_TS2	Iingest_data2	160
> Ingest_TS2	Iingest_data1	80
> Ingest_TS2	Iingest_log	80

ICG move from Challenge to ACG Origin 300:

1. Stop all polling and flush all current Ingest requests through the system.
2. Quiesce and shut down the rest of the system.
3. Log on to the l0icg01 host and cd /usr/ecs/<MODE>/CUSTOM/
4. Run the Ecs Assist utility to clean up all the old .install logs by running the following command:
EcCoDeleteInstallLogs <MODE> 1 <host> YES
5. cd to each of the following directories and enter the following command:

```
\rm -f *.parms.*
/usr/ecs/<MODE>/CUSTOM/.installed/CSS/IDG
/usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry
/usr/ecs/<MODE>/CUSTOM/.installed/CSS/NameServer
/usr/ecs/<MODE>/CUSTOM/.installed/INS
```
6. cd to /usr/ecs/<MODE>/CUSTOM/data/INS and enter the following commands:

```
rm -f .dataprovers.*
rm -f .granservers.*
rm -f .IngestGuiInstances*
```
7. Tar up the following directories using a command similar to the following:

```
tar -cvf . icg01_data1_TS2 /.installed/CSS/ /.installed/INS ./bin/CSS ./bin/INS
./dbms/CSS ./dbms/INS ./data/INS ./data/CSS ./lib/CSS ./lib/INS ./recovery ./temp
./toolkit ./utilities
```
8. cd /usr/ecs/<MODE>/CUSTOM/icl/l0icg01/data
9. Tar up all the subdirectories under this mount point using a command similar to the following:

```
tar -cvf icg01_icl_TS2 *
```

NOTE: This may take a while depending on how many polling directories and how much data are in them.
10. cd /usr/ecs/<MODE>/CUSTOM/dbms/COM/DBAdmin/icg2acg
11. cp db_list_larc to db_list

12. Create link /sybdumpA to /usr/ecs/OPS/COTS/sybase/sybase_dumps.
13. cp stripes_list_larc to stripes_list
14. Enter: icg2acg <MODE> ICG ALL l0icg01_svr sa
NOTE: This script must be run as sa for some functions. This is the icg2acg script written specifically for this consolidation.
15. Select Menu Option 17 (dbcc check) - This runs a dbcc check on the EcCsNameServer, EcCsRegistry and Ingest database for the specified mode. If the dbccs indicates errors, then fix those errors before proceeding.
16. After all dbcc errors are corrected, then run Menu Option 5 (dump_db). You will be prompted for a unique string (no blanks). This string can be any thing you want, but you may want to enter something like the date, time, and server this dump came from. This will dump the three databases listed to the directory in the stripes_list file. These files will be compressed.
17. As Sybase, ftp those files to the dump directory on the l0acg02 host.
18. Logon to l0acg02 and cd /usr/ecs/<MODE>/CUSTOM/dbms/COM/DBAdmin/icg2acg
19. Repeat steps 11 and 12 from above.
20. Enter: icg2acg <MODE> ICG ALL l0acg02_svr sa
NOTE: This script must be run as sa for some functions like loading databases.
21. Select Menu Option 6 (load_db and online database). You will be prompted for a unique string. Enter exactly the same string you entered when you dumped the databases. This will load the dumps that came from l0icg01_svr into the database on the l0acg02_svr.
22. Repeat steps 14 and 15 from above.
23. Select Menu Option 3 (drop_users) this will drop all the users that are baselined in the database.
24. Select Menu Option 7 (list_users) to list the users in each database. If any users are listed, except the dbo, then exit out of the script and manually drop these users.
25. Using the script select Menu Option 4 (add_user) this is adding all of the baselined users.
26. Select Menu Option 7 (list_users) to list all the users to verify all the users were added.
27. Select Menu Option 14 (drop_thresh) to drop all the thresholds for these databases.
28. Select Menu Option 15 (list_thresh) to verify all the thresholds were dropped.
29. After all thresholds are dropped, re-add the thresholds by using Menu Option 16 (add_thresh) then run Menu Option 15 (list_thresh) again to verify that the thresholds were correctly added.
30. Select Menu Option 12 (grant_perms) to grant permissions to the users and groups.

31. Log on to l0acg02.
32. Bind ICG logins to your ECS exec class. Refer to the Drill Down Technical Directive for procedures.
33. Repeat steps 4 – 6 from above.
34. In the /usr/ecs/<MODE>/CUSTOM/data/INS directory rename the .dataproviders file by adding .acg on the end of the files by entering the following command:
mv .dataproviders .dataproviders.acg
35. cd /usr/ecs/<MODE>/CUSTOM/.installed/INS
36. mv .cfgparms .cfgparms.acg
37. mv .cfgInPollwop .cfgInPollwop.acg
38. mv .cfgInPollwp .cfgInPollwp.acg
39. cd /usr/ecs/<MODE>/CUSTOM/
40. sftp to l0icg01 and get the icg01_data1_<MODE> file
41. Untar the icg01_data1_<MODE> file using the following command:
tar -xvf icg01_data1_<MODE>
42. cd /usr/ecs/<MODE>/CUSTOM/acm/n0icg01/data
43. sftp to l0icg01 and get the icg01_icl_<MODE> file.
44. Untar the icg01_data1_<MODE> file using the following command:
tar -xvf icg01_icl_<MODE>
45. Log on to any SUN in the system and bring up E.A.S.I.
46. Using E.A.S.I install the .EcCsCommon.pkg
47. Using E.A.S.I run the Mkcfcg for common on all hosts. (This generates 2 files on all hosts /usr/ecs/<MODE>/CUSTOM/cfg/EcLgLogCtrl.CFG and the /usr/ecs/<MODE>/CUSTOM/utilities/fos_services files). The fos_services file is used by all code to indicated the host and port number of where the Name Server is listening.
48. Log on to the l0ins02 host and remove the newly generated *CFG files for CSS. (These files should not have changed).
49. Logon to the host where the Registry GUI (l0dms04) resides and bring up the Registry GUI. (Using l0icg01_svr as the Sybase server).
50. Copy the current registry tree to a new tree name and map the mode to the new tree name.
51. On the new tree delete the l0icg01 node.
52. Logon to the l0acg02 host.
53. cd /usr/ecs/<MODE>/CUSOTM/data/INS

54. cp .dataproviders .dataproviders.icg
55. Using an editor combine the .dataproviders and .dataproviders.acg file.
56. cd /usr/ecs/<MODE>/CUSTOM/.installed/INS
57. cp .cfgInPollwop .cfgInPollwop.icg
58. cp .cfgInPollwp .cfgInPollwp.icg
59. Combine the .cfgInPollwop and .cfgInPollwop.acg files into one file.
60. Combine the .cfgInPollwp and .cfgInPollwp.acg files into one file.
61. Edit the .cfgparms, .cfgInPollwp and .cfgInPollwop files and change all instances of icl to acm and all instances of l0icg01 to l0acg02.
62. On l0acg02 bring up EcsAssist Subsystem manager and after choosing the appropriate mode, drill down through INGEST to EcIn. Then click on Configuration button.
63. Choose the .cfgInPollwop, .cfgInPollwp, .dataproviders, .granservers, and .IngestGuiInstances files. When the Ingest Specific Files screen come up verify that the data is correct for the Polling Data Provider W/DR, WO/DR, InGranServer Information and Ingest GUI Instances Information is correct. Then click on the Continue button.
64. Choose the .cfgparms.
65. Click on EcInPolling and verify that the IngestLocalPostModeBasePath, IngestRemotePostModeBasePath and INGEST_DSQUERY are set correctly.
66. Click on EcInGran and verify that the IngestLocalPostModeBasePath, IngestRemotePostModeBasePath, INGEST_DSQUERY and ECS_INGEST_PREPROCESSING_LOCAL_DISK are set correctly.
67. Click on EcInReqMgr and verify that the IngestLocalPostModeBasePath, IngestRemotePostModeBasePath and INGEST_DSQUERY are set correctly.
68. Click Ok. This will generate all the /usr/ecs/<MODE>/CUSTOM/cfg/EcIn*.CFG files.
69. sftp the files /usr/ecs/<MODE>/CUSTOM/cfg/EcIn*.rgy files from l0icg01 to l0acg02.
70. Diff the newly generated EcIn*.CFG files with the EcIn*.CFG.rgy files.
71. Verify that any differences can be accounted for.
72. Use the EcCoPopulateRegistry utility load the newly generated EcIn*.CFG files into the Registry in the new Registry tree. The format of this command is:
EcCoPopulateRegistry MODE {HostName|ALL} {ConfigFileName|ALL}
DbServerName DbUserName DbPassword DbName AttributeTreeName [Buffersize]
73. Move the newly generated *.CFG files to *.rgy files.
74. Logon on to l0acs03.
75. cd /usr/ecs/<MODE>/CUSTOM/.isntalled/INS

76. Edit the .cfgparms file and change all instances of icl to acm and all instances of n0icg01 to n0acg01. **NOTE:** (If you change all instances of IngestLocalPostModeBasePath and IngestRemotePostModeBasePath to the same correct value you will not have problems creating unneeded directories). Even though the EcInReqMgr does not run on this host the script that creates the remote and local directories uses this value under the EcInReqMgrMkcfg: tag.
77. Bring up Ecs Assist Subsystem Manager.
78. Choose the .cfgInPollwop , .cfgInPollwp, and .IngestGuiInstances files. When the Ingest Specific Files screen come up verify the data is correct for the Ingest GUIs. Then click on the Continue button.
79. Choose the .cfgparms.
80. Verify that the .cfgparms are correct for the .EcInGUI. Then run the Mkcfgs. This will create new /usr/ecs/<MODE>/CUSTOM/cfg/EcIn*.CFG files.
81. Now bring up the Name Server and Registry for the specified mode.
82. Logon to the host where the STMGT GUI is installed.
83. Bring up the STMGT GUI.
84. Delete the ICL staging Disk Server and ICL Ftp Server.

7.1.2 LARC Rollback Plan

1. Quiesce all modes.
2. Dump all “old l0icg01” (Ingest, Registry, and NameServer) databases on the new l0acg02 host.
3. Shut down l0acg02 host.
4. Move database dumps to the old l0icg01 host.
5. Load databases on old l0icg01 host.
6. Run dropuser script(s) on old l0icg01 database server for old l0icg01 databases.
7. Run adduser script(s) on old l0icg01 database server for old l0icg01 databases.
8. Map the old registry tree to the mode(s) being moved back.
9. Modify fos_services files on all hosts to point to the l0icg01 host.
10. Start servers and perform check out.

7.1.3 SPG Configuration

1. Load New Origin from l0console1 per Baseline.
2. Configure l0spg11 on network w/o HiPPI.

3. Get Autosys Client license for l0spg11.
4. Copy over /data1 from l0spg01/l0spg05/l0spg06 to l0spg11.
5. Install Autosys on l0spg11, configure Server on l0sps04 to use l0spg11 as client.
6. Transfer all PDPS activity from l0spg05 to l0spg01 during transition.
7. Shutdown l0spg05 and remove RAID.
8. Attach RAID to l0spg11 and change ownership to l0spg11.
9. Set up NFS mounts similar to l0spg01 and l0spg05 but non-HiPPI.
10. Configure all other networked machine to mount l0spg11 instead of l0spg05.
11. Install Clear Case on l0spg11 and copy over any needed files, reload VOBS from RAID.
12. Test Autosys on l0spg11.
13. Install Custom Code on l0spg11.
14. Test PDPS Production on l0spg11.
15. Transfer all PDPS Production from l0spg01 to l0spg11.
16. Transfer all Clear Case VOBS from l0spg01 to l0spg11.
17. Transfer Cron Jobs over.
18. Change Firewall rules to redirect from l0spg01 to l0spg11 so the outside world doesn't need to change.
19. Shutdown l0spg01 and transfer RAID to l0spg11.
20. Combine RAID on l0spg11 into 1 large volume.

7.2 HiPPI Replacement Procedures

The HiPPI replacement procedures are written with the assumptions that the following work has already been completed:

1. Gigabit interface cables have been installed and waiting for connection to platforms.
2. The Catalyst 3550 has been installed and waiting for connection.
3. The gigabit interface cards are installed in the platforms.
4. The SGI Patch 5350 is installed.

The LaRC Host HiPPI Addresses document, sent out by Randy Haynes of System Engineering, is used to facilitate the HiPPI network replacement with the Gigabit network.

Due to the security of IP addresses, the LaRC Host HiPPI Addresses document is not published in this document. The procedures detailed in the LaRC Host HiPPI Addresses document

includes changing the IP address from HiPPI to Gigabit for all existing hosts and adding the new IP addresses for the new hosts. This is accomplished by changing each <host_name>h /etc/hosts, /etc/hosts.allow files, and modifying DNS. Also, the SLCsocks5.conf and clientproxy.conf files have to be modified.

8. NSIDC SGI Power Challenge/HiPPI Replacement Procedures

The procedures for the SGI Power Challenge and HiPPI replacement are separated into 2 different sub-sections. Section 8.1 contains the procedures for the SGI Power Challenge replacement and Section 8.2 contains the procedures for the HiPPI replacement and activation.

8.1 SGI Power Challenge Replacement Procedures

The procedures listed below in sections 8.1.1 and 8.1.2 are the basic steps without the actual “keystrokes” that are required to complete the SGI Power Challenge Replacement. The order in which the steps are implemented are outlined in the “timeline” that has been previously documented with NSIDC. Since the procedures for completing the transition for the ACG/DRG Challenge hosts to the new/loaner Origin 300 hosts contain many of the same steps, the procedures are located in Appendix A of this document. Appendix B of this document details the procedures for the Sybase portion of the transition. The procedures that are functionality or host specific are detailed in their corresponding sections.

Prerequisites:

The following procedures can be done prior to the start of down time. These procedures are for the new ACG and loaner DRG host.

1. Move license servers from n0acg01, n0icg01, and n0drg01 to different hosts specified by DAAC.
2. Build a 6.5.17 Distribution Server on n0console1 using the cloned distribution disk provided by Landover.
3. Set up profiles for DRG and ACG hosts.
4. Set up new hosts (new names) n0acg01_new and n0drg01_new as trusted host locally only.
5. Connect to the network and power on the Origin 300's (new ACG and loaner DRG).
6. Configure Temp IP addresses in the NVRAM on hosts n0acg01_new and n0drg01_new.
7. Boot into mini root using bootp from “sgidist” (n0console1).
8. Repartition the second internal disk as a boot disk and the third internal disk as /data1 from admin shell for each host.
9. Make a file system on the new partitions and mount the directories as /newroot and /newdata1.
10. Get AMASS temporary auth string.
11. On Challenge hosts copy “network” files, rename, and move to a different location.

12. Perform AMASS backups on n0drg01 host.
13. If the sysdb file is on an internal drive on the n0drg01 host, make a copy onto the RAID.
14. Run all cables for Gig E network.
15. Install ICG to ACG patch on all hosts.

8.1.1 NSIDC ACG-ICG Consolidation

ACG move from Challenge to new Origin 300:

NOTE: Reference Appendix A for sample output for steps 2-13.

1. Quiese the system and bring down all custom code making sure that the daily back-ups have completed. Unmount and unexport file systems from the n0acg01 (Challenge) host everywhere.
2. Add n0acg01_new (Origin 300) as a trusted host on the n0acg01 (Challenge) host.
3. Fail SCSI LUNS to single controller.
4. Clone /root and /data1 from Challenge to disks 2 and 3 on Origin 300.
5. Power down Origin 300 and move disk 2 to disk 1 position and disk 3 to disk 2 position.
6. Power down Challenge, remove all power and connections, and move aside.
7. Boot the n0acg01_new host into mini root with a fix option then run Install Fresh. At this point, the Origin 300 will be n0acg01 host.
8. Do Admin load from the “sgidist” (n0console1). This is updating the 6.5.14 to run on the Origin 300.
9. Reboot n0acg01 into single-user mode.
10. Restore the network files and modify the /etc/loconfig.conf to match Challenge then shut down the host.
11. Relocate the Origin 300 into the Challenge location, connecting power and the SCSI RAID.
12. Shut down Origin and reboot into mini-root without Sybase running.
13. Upgrade Origin 300 to IRIX 6.5.17 and connect Fiber RAID.
14. Reboot the Origin and manually start Sybase.
15. If sybase_dumps does not exist, create a link /usr/ecs/OPS/COTS/sybase/sybase_dumps to /sybdump8 file system. Also, create directories owned by Sybase for the following:
 - sybase_dumps/dumps
 - sybase_dumps/dumps/logs
 - sybase_dumps/trans
 - sybase_dumps/trans/logs

16. Dump databases from old SCSI RAID to new Fiber RAID using the script delivered in Patch_6A.07_ICG2ACG.01B. The icg2acg scripts are documented in Appendix C. (Check and make sure the same device for dumps and transaction logs were created.)
17. Remove Sybase from the /data1 directory.
18. Install and configure Sybase using Appendix B.

NOTE: Both ACG/ICG databases have been created as well as dbo logins. The following is a list of the logins that have been created:

dpl_role	sdsrv_role	nbsub_role	mss_role
oms_role	stmgt_role	css_role	ingest_role

19. Using the scripts delivered in Patch_6A.07_ICG2ACG.01B, load the database dumps created in step 16.
20. Using the scripts delivered in Patch_6A.07_ICG2ACG.01B, add logins for both the ACG and ICG databases.
21. Using the scripts delivered in Patch_6A.07_ICG2ACG.01B, drop users, add users, drop thresholds, add thresholds and set permissions for all users. (See ICG move from challenge for the order of menu options to use.) The icg2acg scripts are documented in Appendix C.

ICG move from Challenge to ACG Origin 300:

1. Stop all polling and flush all current Ingest requests through the system.
2. Quiesce and shut down the rest of the system.
3. Log on to the n0icg01 host and cd /usr/ecs/<MODE>/CUSTOM/
4. Run the Ecs Assist utility to clean up all the old .install logs by running the following command:
EcCoDeleteInstallLogs <MODE> 1 <host> YES
5. cd to each of the following directories and enter the following command:

```
\rm -f *.parms.*
/usr/ecs/<MODE>/CUSTOM/.installed/CSS/IDG
/usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry
/usr/ecs/<MODE>/CUSTOM/.installed/CSS/NameServer
/usr/ecs/<MODE>/CUSTOM/.installed/INS
```
6. cd to /usr/ecs/<MODE>/CUSTOM/data/INS and enter the following commands:

```
rm -f .dataprovers.*
rm -f .granservers.*
rm -f .IngestGuiInstances*
```
7. Tar up the following directories using a command similar to the following:

```
tar -cvf . icg01_data1_TS2 /.installed/CSS/ /.installed/INS ./bin/CSS ./bin/INS ./dbms/CSS
./dbms/INS ./data/INS ./data/CSS ./lib/CSS ./lib/INS ./recovery ./temp ./toolkit ./utilities
```

8. `cd /usr/ecs/<MODE>/CUSTOM/icl/n0icg01/data`
9. Tar up all the subdirectories under this mount point using a command similar to the following:
`tar -cvf icg01_icl_TS2 *`
NOTE: This may take a while depending on how many polling directories and how much data are in them.
10. `cd /usr/ecs/<MODE>/CUSTOM/dbms/COM/DBAdmin/icg2acg`
11. `cp db_list_nsidc to db_list`
12. `cp stripes_list_nsidc to stripes_list`
13. Enter: `icg2acg <MODE> ICG ALL n0icg01_srvr sa`
NOTE: This script must be run as sa for some functions. This is the icg2acg script written specifically for this consolidation.
14. Select Menu Option 17 (dbcc check) - This runs a dbcc check on the EcCsNameServer, EcCsRegistry and Ingest database for the specified mode. If the dbccs indicates errors, then fix those errors before proceeding.
15. After all dbcc errors are corrected, then run Menu Option 5 (dump_db). You will be prompted for a unique string (no blanks). This string can be any thing you want, but you may want to enter something like the date, time, and server this dump came from. This dumps the three databases listed to the directory in the stripes_list file. These files are compressed.
16. As Sybase, ftp those files to the dump directory on the n0acg01 host.
17. Logon to n0acg01 and `cd /usr/ecs/<MODE>/CUSTOM/dbms/COM/DBAdmin/icg2acg`
18. Repeat steps 11 and 12 from above.
19. Enter: `icg2acg <MODE> ICG ALL n0acg01_srvr sa`
NOTE: This script must be run as sa for some functions like loading databases.
20. Select Menu Option 6 (load_db and online database). You will be prompted for a unique string. Enter exactly the same string you entered when you dumped the databases. This will load the dumps that came from n0icg01_srvr into the database on the n0acg01_srvr.
21. Repeat steps 14 and 15 from above.
22. Select Menu Option 3 (drop_user) this will drop all the users that are baselined in the database.
23. Select Menu Option 7 (list_user) to list the users in each database. If any users are listed, except the dbo, then exit out of the script and manually drop these users.
24. Using the script again. Select Menu Option 4 (add_user) this will add all the baselined users.
25. Select Menu Option 7 (list_user) to list all the users to verify all the users were added.

26. Select Menu Option 14 (drop_thresh) this will drop all the thresholds for these databases.
27. Select Menu Option 15 (list_thresh) to verify all the thresholds were dropped.
28. After all thresholds are dropped, re-add the thresholds using Menu Option 16 (add_thresh) then select Menu Option 15 (list_thresh) to verify that the thresholds were correctly added.
29. Select Menu Option 12 (grant_perms) to grant permissions to the users and groups.
30. Log on to n0acg01.
31. Repeat steps 4 – 6 from above.
32. In the /usr/ecs/<MODE>/CUSTOM/data/INS directory rename the .dataproviders file by adding .acg on the end of the files by entering the following command:
mv .dataproviders .dataproviders.acg
33. cd /usr/ecs/<MODE>/CUSTOM/.installed/INS
34. mv .cfgparms .cfgparms.acg
35. mv .cfgInPollwop .cfgInPollwop.acg
36. mv .cfgInPollwp .cfgInPollwp.acg
37. cd /usr/ecs/<MODE>/CUSTOM/
38. sftp to n0icg01 and get the icg01_data1_<MODE> file.
39. Untar the icg01_data1_<MODE> file using the following command:
tar -xvf icg01_data1_<MODE>
40. cd /usr/ecs/<MODE>/CUSTOM/acm/n0icg01/data
41. sftp to n0icg01 and get the icg01_icl_<MODE> file.
42. Untar the icg01_data1_<MODE> file using the following command:
tar -xvf icg01_icl_<MODE>
43. Log on to any SUN in the system and bring up E.A.S.I.
44. Using E.A.S.I install the .EcCsCommon.pkg on all machines.
45. Using E.A.S.I run the Mkcfg for common on all hosts. (This generates 2 files on all hosts /usr/ecs/<MODE>/CUSTOM/cfg/EcLgLogCtrl.CFG and the /usr/ecs/<MODE>/CUSTOM/utilities/fos_services files). The fos_services file is used by all code to indicated the host and port number of where the Name Server is listening.
46. Log on to the n0ins02 host and remove the newly generated *CFG files for CSS. (These files will not have changed.)
47. Logon to the host where the Registry GUI (n0dms04) resides and bring up the Registry GUI. (Using n0icg01_srvr as the Sybase server)
48. Copy the current registry tree to a new tree name and map the mode to the new tree name.

49. On the new tree delete the n0icg01 node.
50. Logon to the n0acg01 host.
51. `cd /usr/ecs/<MODE>/CUSOTM/data/INS`
52. `cp .dataprovers .dataprovers.icg`
53. Using an editor combine the .dataprovers and .dataprovers.acg file.
54. `cd /usr/ecs/<MODE>/CUSTOM/.installed/INS`
55. `cp .cfgInPollwop .cfgInPollwop.icg`
56. `cp .cfgInPollwp .cfgInPollwp.icg`
57. Combine the .cfgInPollwop and .cfgInPollwop.acg files into one file.
58. Combine the .cfgInPollwp and .cfgInPollwp.acg files into one file.
59. Edit the .cfgparms, .cfgInPollwp and .cfgInPollwop files and change all instances of icl to acm and all instances of n0icg01 to n0acg01.
60. On n0acg01 bring up EcsAssist Subsystem manager and after choosing the appropriate mode, drill down through INGEST to EcIn. Then click on Configuration button.
61. Choose the .cfgInPollwop , .cfgInPollwp, .dataprovers, .granservers, and .IngestGuiInstances files. When the Ingest Specific Files screen come up verify that the data is correct for the Polling Data Provider W/DR, WO/DR, InGranServer Information and Ingest GUI Instances Information is correct. Then click on the continue button.
62. Choose the .cfgparms.
63. Click on EcInPolling and verify the IngestLocalPostModeBasePath, IngestRemotePostModeBasePath and INGEST_DSQUERY are set correctly.
64. Click on EcInGran and verify the IngestLocalPostModeBasePath, IngestRemotePostModeBasePath, INGEST_DSQUERY and ECS_INGEST_PREPROCESSING_LOCAL_DISK are set correctly.
65. Click on EcInReqMgr and verify the IngestLocalPostModeBasePath, IngestRemotePostModeBasePath and INGEST_DSQUERY are set correctly.
66. Click Ok. This will generate all the /usr/ecs/<MODE>/CUSTOM/cfg/EcIn*.CFG files.
67. sftp the files /usr/ecs/<MODE>/CUSTOM/cfg/EcIn*.rgy files from n0icg03 to n0acg01.
68. Diff the newly generated EcIn*.CFG files with the EcIn*.CFG.rgy files.
69. Verify that any differences can be accounted for.
70. Use the EcCoPopulateRegistry utility load the newly generated EcIn*.CFG files into the Registry in the new Registry tree. The format of this command is:
`EcCoPopulateRegistry MODE {HostName|ALL} {ConfigFileName|ALL} DbServerName
DbUserName DbPassword DbName AttributeTreeName [Buffersize]`

71. Move the newly generated *.CFG files to *.rgy files.
72. Logon on to n0acs03.
73. `cd /usr/ecs/<MODE>/CUSTOM/.isntalled/INS`
74. Edit the .cfgparms file and change all instances of icl to acm and all instances of n0icg01 to n0acg01. **NOTE:** (If you change all instances of IngestLocalPostModeBasePath and IngestRemotePostModeBasePath to the same correct value you will not have problems creating unneeded directories). Even though the EcInReqMgr does not run on this host the script that creates the remote and local directories uses this value under the EcInReqMgrMkcfg: tag.
75. Bring up Ecs Assist Subsystem Manager.
76. Choose the .cfgInPollwop , .cfgInPollwp, and .IngestGuiInstances files. When the Ingest Specific Files screen come up verify the data is correct for the Ingest GUIs. Then click on the continue button.
77. Choose the .cfgparms.
78. Verify that the .cfgparms are correct for the .EcInGUI. Then run the Mkcfgs. This will create new /usr/ecs/<MODE>/CUSTOM/cfg/EcIn*.CFG files.
79. Now bring up the Name Server and Registry for the specified mode.
80. Logon to the host where the STMGT GUI is installed.
81. Bring up the STMGT GUI.
82. Delete the ICL staging Disk Server and ICL Ftp Server.

8.1.2 DRG Relocation

DRG move from Challenge to Loaner Origin 300:

NOTE: Reference Appendix A for sample output for steps 4-15.

1. Quiese the system and bring down all custom code making sure that the daily back-ups have completed. Unmount and unexport file systems from the n0drg01 (Challenge) host everywhere.
2. Perform backup of the AMASS databases on the DRG host.
/usr/amass/tools/amassback -fv
3. Disable AMASS at boot and stop AMASS.
Disable AMASS: **# /usr/amass/tools/amass_atboot -d**
Stopping AMASS: **# /usr/amass/tools/killdaemons -f -t0**
Note: If AMASS does not stop successfully, reboot the host, login, and then shut down AMASS.

4. Add n0drg01_new (Origin 300) as a trusted host on the n0drg01 (Challenge) host.
5. Fail SCSI LUNS to single controller.
6. Clone /root and /data1 from Challenge to disks 2 and 3 on Origin 300.
7. Power down Origin 300 and move disk 2 to disk 1 position and disk 3 to disk 2 position.
8. Power down Challenge.
9. Boot the n0drg01_new host into mini root with a fix option then run Install Fresh. At this point, the Origin 300 will be n0drg01 host.
10. Do Admin load from the “sgidist” (n0console1). This is updating the 6.5.14 to run on the Origin 300.
11. Reboot n0acg01 into single-user mode.
12. Restore the network files and modify the /etc/loconfig.conf to match Challenge.
13. Shut down both “DRG” hosts and move the SCSI RAID from the Challenge to the Origin 300 host.
14. Boot n0drg01 host into single user mode and solve any conflicts.
15. Check that all logical volumes are complete and assigned to the correct host name.
16. Install temporary AMASS auth string.

```
# su root
```

```
# cd /usr/amass/scripts
```

```
# ./change_auth
```

17. Reboot n0drg01.
18. Run install_tests to verify that AMASS is working correctly.

```
# /usr/amass/tools/install_tests
```

DRG move from Loaner Origin 300 to Origin 2000:

1. Quiese the system and bring down all custom code making sure that the daily back-ups have completed. Unmount and unexport file systems from the n0drg01 (Loaner Origin) host everywhere.
2. Perform backup of the AMASS databases on the DRG host.

```
# /usr/amass/tools/amassback -fv
```

3. Disable AMASS at boot and stop AMASS.

```
Disable AMASS: # /usr/amass/tools/amass_atboot -d
```

```
Stopping AMASS: # /usr/amass/tools/killdaemons -f -t0
```


Note: If AMASS does not stop successfully, reboot the host, login, and then shut down AMASS.

4. Add n0drg01_new (Origin 2000) as a trusted host on the n0drg01 (Origin 300) host.
5. Clone /root and /data1 from Origin 300 to Origin 2000.
6. Power down Origin 300.
7. Boot the n0drg01_new host into mini root with a fix option then run Install Fresh. At this point, the Origin 2000 will be n0drg01 host.
8. Reboot n0drg01 into single-user mode.
9. Restore the network files and modify the /etc/loconfig.conf to match the Origin 300.
10. Shut down both “DRG” hosts and move the SCSI RAID from the Origin 300 to the Origin 2000 host.
11. Boot n0drg01 host into single user mode and solve any conflicts.
12. Reboot n0drg01 and migrate LUNS to default owners (this will set the controllers up on the host).
13. Check that all logical volumes are complete and assigned to the correct host name.
14. Install AMASS using AMASS PSR document.
15. Run install_tests to verify that AMASS is working correctly.

/usr/amass/tools/install_tests

16. Reboot n0drg01.

8.2 HiPPI Replacement Procedures

The HiPPI replacement procedures are written with the assumptions that the following work has already been completed:

1. Gigabit interface cables have been installed and waiting for connection to platforms.
2. The catalyst 3550 has been installed and waiting for connection.
3. The gigabit interface cards are installed in the platforms.
4. The SGI Patch 5350 is installed.

The NSIDC Host HiPPI Addresses document, sent out by Randy Haynes of System Engineering, is being used to facilitate the HiPPI network replacement with the Gigabit network.

Due to the security of IP addresses, the NSIDC Host HiPPI Addresses document is not published in this document. The procedures detailed in the NSIDC Host HiPPI Addresses document is changing the IP address from HiPPI to Gigabit for all existing hosts and adding the new IP

addresses for the new hosts. This is accomplished by changing each <host_name>h /etc/hosts, /etc/hosts.allow files, and modifying DNS. Also, the SLCsocks5.conf and clientproxy.conf files have to be modified.

9. PVC SGI Power Challenge/HiPPI Replacement Procedures

The procedures for the SGI Power Challenge and HiPPI replacement are separated into 2 different sub-sections. Section 9.1 is the procedures for the SGI Power Challenge replacement and Section 9.2 is the procedures for the HiPPI replacement and activation.

9.1 SGI Power Challenge Replacement Procedures

Replacement has already been completed.

9.2 HiPPI Replacement Procedures

The HiPPI replacement procedures are written with the assumptions that the following work has already been completed:

1. Gigabit interface cables have been installed and waiting for connection to platforms.
2. The catalyst 3550 has been installed and waiting for connection.
3. The gigabit interface cards are installed in the platforms.
4. The SGI Patch 5350 is installed.

The PVC Host HiPPI Addresses document, sent out by Randy Haynes of System Engineering, is used to facilitate the HiPPI network replacement with the Gigabit network.

Due to the security of IP addresses, the PVC Host HiPPI Addresses document is not published in this document. The procedures detailed in the PVC Host HiPPI Addresses document is changing the IP address from HiPPI to Gigabit for all existing hosts and adding the new IP addresses for the new hosts. This is accomplished by changing each <host_name>h /etc/hosts, /etc/hosts.allow files, and modifying DNS. Also, the SLCsocks5.conf and clientproxy.conf files have to be modified.

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10. VATC SGI Power Challenge/HiPPI Replacement

The procedures for the SGI Power Challenge and HiPPI replacement is separated into 2 different sub-sections. Section 10.1 is the procedures for the SGI Power Challenge replacement and Section 10.2 is the procedures for the HiPPI replacement and activation.

10.1 SGI Power Challenge Replacement Procedures

10.1.1 VATC ACG-ICG Consolidation

In the VATC, the code and databases from the existing ICG host is moved to the existing ACG host.

1. Quiesce all modes.
2. Clone /data1 disk from existing t1acg04 host.
3. Shut down existing t1acg04 host.
4. Move RAID from old t1acg04 host to new t1acg04 host.
5. Start up new t1acg04 host.
6. Configure new host:
 - a. load /data1 from old host
 - b. reconfigure Sybase for additional 3 databases per mode from t1icg03
7. Check out new host running t1acg04 code only.
8. Dump databases from old t1icg03 host.
9. Create a tar file of CUSTOM directories to be transferred. Under the /usr/ecs/<MODE>/CUSTOM directory, tar the following:
 - (a) .installed/CSS
 - (b) .installed/INS
 - (c) bin/CSS
 - (d) bin/INS
 - (e) data/CSS
 - (f) data/INS
 - (g) dbms/CSS
 - (h) dbms/INS

- (i) lib/CSS
 - (j) lib/INS
 - (k) utilities
10. Move database dumps and tar files from t1icg03 host to t1acg04 host.
 11. Prior to untarring the files on the t1acg04 host, any existing Ingest polling configurations need to be preserved. To do this complete the following:
 - (a) `cd /usr/ecs/<MODE>/CUSTOM/.installed/INS`
 - (b) If there are any .cfgInPollwop or .cfgInPollwp files with a non-zero file length, move them to a temporary name (such as .cfgInPollwop.acg and .cfgInPollwp.acg).
 12. Untar the file(s) moved from t1icg03.
 13. If there were any .cfgPollwop or .cfgInPollwp files saved in step 11 above, edit the new .cfgPollwop or .cfgInPollwp files to append the data from the files that were saved off.
 14. Load databases from t1icg03 host on t1acg04 host.
 15. Run login script on t1acg04 database server.
 16. Run dropuser script(s) on t1acg04 database server for old t1icg03 databases.
 17. Run adduser script(s) on t1acg04 database server for old t1icg03 databases.
 18. Run grant permission scripts on t1acg04 database server for old t1icg03 databases.
 19. Using the Registry GUI:
 - a. Create a new registry tree for the new configuration.
 - b. Map the new tree to the mode(s) being transitioned.
 - c. Copy the .CFG entries from the t1icg03 branch to the t1acg04 branch. Do not copy over any entries for servers that already exist on the t1acg04 branch.
 - d. Delete the existing t1acg04 branch (which should now have no entries).
 - e. Rename the t1icg03 branch t1acg04.
 20. Update the ingest database for the mode being transitioned to point to the correct ECS FTP Server (some data types are configured to use the ICL1 instance of the FTP Server, which will no longer exist after the consolidation is completed).
 - a. Log into the Ingest<_MODE> database on the acg host as the dbo.
 - (b) Run the following command:


```
update InDataTypeTemplate
set IngestFtpKey = "DRP1_"
where IngestFtpKey = "ICL1_"
go
```

```
| update InDataTypeTemplate
  set StorageMgmtKey = "DRP1_"
  where StorageMgmtKey = "ICL1_"
go
```

21. Two changes need to be made to reflect the fact that the servers are now running on the t1acg04 host and using the /usr/ecs/<MODE>/CUSTOM/drp/t1drg01/...directories instead of the /usr/ecs/<MODE>/CUSTOM/icl/t1icg03/...directories.

To make these required changes, on t1acg04 edit the following files under /usr/ecs/<MODE>/CUSTOM/.installed/INS, replacing all instances of t1icg03_srvr with t1acg04_srvr. Also replace all instances of "/icl/t1icg03" with "/drp/t1drg01".

- (a) .cfgparms
- (b) .cfgInPollwop
- (c) .cfgInPollwp

22. On the t1acg04 host, create needed directories and update configuration files/registry entries by doing the following:

- (a) Start ECS Assist Subsystem Manager and run mkcfg for EcIn (if step 12 was completed correctly, there should be no need to modify any parameters while running mkcfg).
- (b) Populate the registry with all .CFG file from t1acg04.
- (c) Move all .CFG files under /usr/ecs/<MODE>/CUSTOM/cfg to .CFG.rgy files.

23. Some Ingest GUI configuration parameters need to be updated to reflect the changes to t1acg04. On the t1dps01 host, update the IngestGUIInputData, IngestLocalPostModeBasePath, and IngestRemotePostModeBasePath values to reflect the change to the .../drp/t1drg01/...directories. Run a mkcfg and populate the registry to make these changes (or update the registry values via the Registry GUI).

24. Modify fos_services files on all hosts to point to the t1acg04 host. This may be done by running Mkcfcg for CSS/IDG on all hosts running ECS custom code (note that this must be done for each mode as it is transitioned).

25. Start servers and check out new host running t1acg04 and t1icg03 code

10.1.2 VATC Rollback Plan

- 1. Quiesce all modes.
- 2. Dump all "old t1icg03" (Ingest, Registry, and NameServer) databases on the new t1acg04 host.
- 3. Move database dumps to the old t1icg03 host.
- 4. Load databases on old t1icg03 host.

5. Run dropuser script(s) on old t1icg03 database server for old t1icg03 databases.
6. Run adduser script(s) on old t1icg03 database server for old t1icg03 databases.
7. Map the old registry tree to the mode(s) being moved back.
8. Modify fos_services files on all hosts to point to the t1icg03 host.
9. Shut down new t1acg04 host.
10. Reconnect RAID to old t1acg04 host.
11. Start up old t1acg04 host.
12. Start servers and perform check out.

10.2 HiPPI Replacement Procedures

The HiPPI replacement procedures are written with the assumptions that the following work has already been completed:

1. Gigabit interface cables have been installed and waiting for connection to platforms.
2. The catalyst 3550 has been installed and waiting for connection.
3. The gigabit interface cards are installed in the platforms.
4. The SGI Patch 5350 is installed.

The VATC Host HiPPI Addresses document, sent out by Randy Haynes of System Engineering, is used to facilitate the HiPPI network replacement with the Gigabit network.

Due to the security of IP addresses, the VATC Host HiPPI Addresses document is not published in this document. The procedures detailed in the VATC Host HiPPI Addresses document is changing the IP address from HiPPI to Gigabit for all existing hosts and adding the new IP addresses for the new hosts. This is accomplished by changing each <host_name>h /etc/hosts, /etc/hosts.allow files, and modifying DNS. Also, the SLCsocks5.conf and clientproxy.conf files have to be modified.

Appendix A. ACG/DRG Transition Procedures

The following steps document the process of replacing a Challenge with an Origin 300. A configuration profile must be created on the software distribution server prior to beginning these steps. Reference SGI installation documentation for information on building profiles.

1) From Origin console, boot miniroot from bootp server.

System Maintenance Menu

- 1) Start System
- 2) Install System Software
- 3) Run Diagnostics
- 4) Recover System
- 5) Enter Command Monitor

Option? **5**

Command Monitor. Type "exit" to return to the menu.

```
>> setenv netaddr {Origin IP address}
>> exit
```

System Maintenance Menu

- 1) Start System
- 2) Install System Software
- 3) Run Diagnostics
- 4) Recover System
- 5) Enter Command Monitor

Option? **2**

Installing System Software...

Press <Esc> to return to the menu.

1) Remote Directory X) Local CD-ROM

Enter 1-2 to select source type, <esc> to quit, or <enter> to start: **1**

Enter the name of the remote host: **{distribution server IP address}**

Enter the remote directory: **/data/inst6514**

1) [Remote Directory] X) Local CD-ROM

 *a) Remote directory /data/inst6514 from server 155.157.31.199.

Enter 1-2 to select source type, a to select the source, <esc> to quit, or
<enter> to start: **<Return>**

```
Copying installation program to disk.
..... 10% ..... 20% ..... 30% ..... 40% ..... 50%
..... 60% ..... 70% ..... 80% ..... 90% ..... 100%
```

Copy complete

IRIX Release 6.5 IP35 Version 10100655 System V - 64 Bit

...

...

Default distribution to install from: 155.157.31.199:/data/inst6514

For help on inst commands, type "help overview".

Inst 4.1 Main Menu

1. from [source ...]	Specify location of software to be installed
2. open [source ...]	Specify additional software locations
3. close [source ...]	Close a software distribution location
4. list [keywords] [names]	Display information about software subsystems
5. go	Perform software installation and removal now
6. install [keywords] [names]	Select subsystems to be installed
7. remove [keywords] [names]	Select subsystems to be removed
8. keep [keywords] [names]	Do not install or remove these subsystems
9. step [keywords] [names]	Interactive mode for install/remove/keep
10. conflicts [choice ...]	List or resolve installation conflicts
11. help [topic]	Get help in general or on a specific word
12. view ...	Go to the View Commands Menu
13. admin ...	Go to the Administrative Commands Menu
14. quit	Terminate software installation

Inst> **admin sh**

test0300 4# **fx -x**

fx version 6.5, Oct 9, 2001

fx: "device-name" = (dksc)

fx: ctlr# = (0)

fx: drive# = (1) **2**

fx: lun# = (0)

...opening dksc(0,2,0)

...drive selftest...OK

Scsi drive type == SGI ST318452LC 2742

----- please choose one (? for help, .. to quit this menu)-----

[exi]t [d]ebug/ [l]abel/ [a]uto

[b]adbblock/ [ex]ercise/ [r]epartition/

fx> r/e -b

Warning: you will need to re-install all software and restore user data from backups after changing the partition layout. Changing partitions will cause all data on the drive to be lost. Be sure you have the drive backed up if it contains any user data. Continue? **y**

Enter .. when done

fx/repartition/expert: change partition = (0)

before: type xfs block 8392704, 4098 MB

len: 8192000 blks, 4000 MB

fx/repartition/expert: partition type = (xfs) **xfs**

fx/repartition/expert: first block = (8392704) **8392704**

fx/repartition/expert: number of blocks (max 27450966) = (8192000) **8192000**

```

fx/repartition/expert: change partition = (1)
before:  type raw          block   4096,          2 MB
          len: 8388608 blks, 4096 MB
fx/repartition/expert: partition type = (raw) raw
fx/repartition/expert: first block = (4096) 4096
fx/repartition/expert: number of blocks (max 35839574) = (8388608) 8388608
fx/repartition/expert: change partition = (6) 7
before:  type xfs          block 16584704,        8098 MB
          len: 19258966 blks, 9404 MB
fx/repartition/expert: partition type = (xfs)
fx/repartition/expert: first block = (16584704) 16584704
fx/repartition/expert: number of blocks (max 19258966) = (19258966) 19258966
fx/repartition/expert: change partition = (8) ..

----- please choose one (? for help, .. to quit this menu)-----
[exi]t          [d]ebug/          [l]abel/          [a]uto
[b]adbblock/    [ex]ercise/      [r]epartition/
fx> l/syn

writing label info to dksc(0,2,0)

----- please choose one (? for help, .. to quit this menu)-----
[exi]t          [d]ebug/          [l]abel/          [a]uto
[b]adbblock/    [ex]ercise/      [r]epartition/
fx> exit

test0300 5# mkfs /dev/rdisk/dks0d2s0
meta-data=/dev/dsk/dks0d2s0      isize=256      agcount=8, agsize=128000 blks
data      =                      bsize=4096      blocks=1024000, imaxpct=25
          =                      sunit=0          swidth=0 blks, unwritten=1
naming    =version 2             bsize=4096
log        =internal log         bsize=4096      blocks=1200
realtime   =none                 extsz=65536     blocks=0, rtextents=0
test0300 6# mkdir /newroot
test0300 10# mount /dev/dsk/dks0d2s0 /newroot

```

2) Login to remote Challenge host and enter temporary Origin 300 hostname in /.rhosts file.

3) Copy remote file system via xfsdump to local disk. (Will take approximately 15-45 minutes per filesystem).

```
test0300 11# rsh {remote host IP address} xfsdump - / | xfsrestore - /newroot
```

4) After xfsdump completes successfully, edit files listed below, halt system, power down via console mode, then swap disk 2 into disk 1 positions in Origin 300.

```

# cp -p /etc/hosts /etc/hosts_{Challenge_hostname}
# vi /etc/hosts (change hostname/IP)
# mv /etc/exports /etc/exports_{Challenge_hostname}
# cp -p /etc/sys_id /etc/sys_id_{Challenge_hostname}
# vi /etc/sys_id (change hostname)
# cp -p fstab fstab_{Challenge_hostname}
# vi fstab (comment out all NFS mounts)
# cd /etc/config

```

```
# cp -p static-route.options static-route.options_{Challenge_hostname}
# vi static-route.options (change default route, if necessary)
# cp -p netif.options netif.options_{Challenge_hostname}
# vi netif.options (change iflname variable)
# cd /etc/rc2.d
# mv S{nn}sybase s{nn}sybase_{Challenge_hostname}
# mv S{nn}sybase125 s{nn}sybase125_{Challenge_hostname}
# umount /newroot
```

5) Replace disk #2 with second disk for /data1 xfsump.

```
# fx -x

fx version 6.5, Oct  9, 2001
fx: "device-name" = (dksc)
fx: ctrlr# = (0)
fx: drive# = (1) 2
fx: lun# = (0)
...opening dksc(0,2,0)
...drive selftest...OK
Scsi drive type == SGI          ST318452LC          2742

----- please choose one (? for help, .. to quit this menu)-----
[exi]t          [d]ebug/          [l]abel/          [a]uto
[b]adblock/     [ex]ercise/       [r]epartition/
fx> r/e -b

Warning: you will need to re-install all software and restore user data from
backups after changing the partition layout.  Changing partitions will cause
all data on the drive to be lost.  Be sure you have the drive backed up if it
contains any user data.  Continue? y
Enter .. when done
fx/repartition/expert: change partition = (0) 7
before:  type xfs          block 4096,          2 MB
          len: 35839574 blks, 17500 MB
fx/repartition/expert: partition type = (xfs)
fx/repartition/expert: first block = (4096)
fx/repartition/expert: number of blocks (max 35839574) = (35839574) 35839574
fx/repartition/expert: change partition = (8) ..

----- please choose one (? for help, .. to quit this menu)-----
[exi]t          [d]ebug/          [l]abel/          [a]uto
[b]adblock/     [ex]ercise/       [r]epartition/
fx> l/syn

writing label info to dksc(0,2,0)

----- please choose one (? for help, .. to quit this menu)-----
[exi]t          [d]ebug/          [l]abel/          [a]uto
[b]adblock/     [ex]ercise/       [r]epartition/
fx> exit

test0300 11# mkfs /dev/rdsk/dks0d2s7
meta-data=/dev/rdsk/dks0d2s7      isize=256      agcount=18, agsize=262144 blks
data      =                       bsize=4096      blocks=4479946, imaxpct=25
          =                       sunit=0          swidth=0 blks, unwritten=1
```

```

naming      =version 2                      bsize=4096
log          =internal log                  bsize=4096   blocks=1200
realtime     =none                          extsz=65536  blocks=0, rtextents=0
test0300 12# mkdir /data1
test0300 12# mount /dev/dsk/dks0d2s7 /data1
test0300 13# rsh {remote host IP address} xfsdump - /data1 | xfsrestore -
/data1
xfsrestore: version 3.0
xfsrestore: searching media for dump
...

test0300 11# <Control-T>
..L1> pwr down

..L1> pwr up

```

6) Repeat Step 1 to boot miniroot prior to software installation. At Inst Main Menu enter:

It appears that a miniroot install failed. Either the system is misconfigured or a previous installation failed. If you think the miniroot is still valid, you may continue booting using the current miniroot image. If you are unsure about the current state of the miniroot, you can reload a new miniroot image. You may abort the installation and return to the menu, or you can fix (reset to normal) the miniroot install state See the 'Software Installation Guide' chapter on Troubleshooting for more information

```

Enter 'c' to continue booting the old miniroot with no state fixup.
Enter 'f' to fix miniroot install state, and try again
Enter 'r' to reload the miniroot.
Enter 'a' to abort (cancel) the installation.
Enter your selection and press ENTER (c, f, r, or a) f
miniroot install state reset to normal
Copying installation program to disk.
..... 10% ..... 20% ..... 30% ..... 40% ..... 50%
..... 60% ..... 70% ..... 80% ..... 90% ..... 100%

Copy complete
...
...

```

7) The following text is referenced from the SGI IRIX 6.5.6/6.5.9/6.5.14 Operating System Installation and Upgrade for the ECS Project PSR.

Before starting the installation, create a selections file to indicate that the software is to be installed/upgraded on your machine (as indicated by the Site Hardware-Software Map 920-TDx-002). This is done via the mkprofile.sh script, which will create a custom selections file from the list of software you select while executing script.

1. Collect current software configuration on the target host

Run 'versions' on each of your hosts before upgrading and save the output in a corresponding file in /data/dist/var on the distribution host. This versions output will allow the system to detect software that is currently installed and to pre-select this software for installation in the upgrade

process. You will have an opportunity to review and change these selections before the upgrade process actually begins.

For example (if host f2spg02 were being upgraded):

```
f2spg02# versions > /tmp/f2spg02.versions ↵
```

2. Store target hosts' software configuration information on distribution server

Use ftp to copy the target host's 'versions' file to the /data/dist/var directory on the distribution host:

```
f2spg02% versions > /tmp/f2spg02.versions ↵
f2spg02% ftp sgidist ↵
Connected to corvette.hitc.com.
220-
220-NOTICE: unknown@f2spg02.hitc.com,
220-*****
220-
220-THIS U.S. GOVERNMENT COMPUTING SYSTEM IS FOR AUTHORIZED USERS
220-ONLY. ANYONE USING IT IS SUBJECT TO MONITORING AND RECORDING
220-OF ALL KEYSTROKES WITHOUT FURTHER NOTICE. THIS RECORD MAY BE
220-PROVIDED AS EVIDENCE TO LAW ENFORCEMENT OFFICIALS.
220-
220-*****
220-
220 corvette.hitc.com FTP server ready.
Name (sgidist:klange): ↵
331 Password required for klange.
Password: ***** ↵
230 User klange logged in.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> put /tmp/f2spg02.versions /data/dist/var/f2spg02.versions ↵
local: /tmp/f2spg02.versions remote: /data/dist/var/f2spg02.versions
200 PORT command successful.
150 Opening BINARY mode data connection for '/data/dist/var/f2spg02.versions'.
226 Transfer complete.
72623 bytes sent in 0.01 seconds (8676.40 Kbytes/s)
ftp> quit ↵
221 Goodbye.
```

3. Run mkprofile.sh to create a profile for the target host

As root, on the distribution server, run the mkprofile.sh script

For example (continuing to use f2spg02 as an example):

```
# ./mkprofile.sh f2spg02 ↵
```

```
ECS profile creator for IRIX6.5 installations/upgrades
(covering 6.5.6, 6.5.9, and 6.5.14)
```

```

-----

Creating profile for f2spg02.

Using versions file /data/dist/var/f2spg02.versions...
Upgrading from 6.5.6m...

Here is what you have selected for upgrade on f2spg02:
This information is based on the selections that are already
installed on f2spg02.

WARNING:  While you may change any of the below selections from
          (N)o to (Y)es, do NOT change any of the below
          selections from (Y)es to (N)o.

IRIX 6.5 base operating system: YES (default)
      IRIX 6.5 Overlay Version: 6.5.14
      MIPSPro Compilers: Y (7.3.1.2m)
      HiPPI 3.3.1/BDS 2.1: N
      RAID 3.3: Y
      TP9400 RAID: N
      FlexLM Server: N
      IRISConsole 2.0: N

Modify choices, save and exit, or abort?
([m]odify/[s]ave/[a]bort):  s ↵

Creating selections file for f2spg02.....done.

Profile is now complete.

You are ready to run the upgrade.sh script on f2spg02

Cleaning up...

```

Note: If the selections displayed are not correct, enter **M** to modify your selections. You will then have the opportunity to modify your selections.

For instance, if one wanted to install 6.5.14 and add the TP9400 RAID software:

```

# ./mkprofile.sh f2spg02 ↵

ECS profile creator for IRIX6.5 installations/upgrades
(covering 6.5.6, 6.5.9, and 6.5.14)
-----

Creating profile for f2spg02.

```

Using versions file /data/dist/var/f2spg02.versions...
Upgrading from 6.5.6m...

Here is what you have selected for upgrade on f2spg02:
This information is based on the selections that are already
installed on f2spg02.

WARNING: While you may change any of the below selections from
(N)o to (Y)es, do NOT change any of the below
selections from (Y)es to (N)o.

IRIX 6.5 base operating system: YES (default)
IRIX 6.5 Overlay Version: 6.5.14
MIPSPro Compilers: Y (7.3.1.2m)
HiPPI 3.3.1/BDS 2.1: N
RAID 3.3: Y
TP9400 RAID: N
FlexLM Server: N
IRISConsole 2.0: N

Modify choices, save and exit, or abort?
([m]odify/[s]ave/[a]bort): **m**

Select from one of the following 'Overlay' versions of IRIX 6.5:

- (1) IRIX 6.5.14
- (2) IRIX 6.5.9
- (3) IRIX 6.5.6

Enter the number of the corresponding Overlay product (1,2,3) [1]: **↓**
Do you want to upgrade MIPSpro compilers? (y/n) [Y]: **↓**

Select from one of the following versions of MIPSPro compilers:

- (1) MIPSPro 7.3.1.2m
- (2) MIPSPro 7.2.1.3m

Enter the number of the corresponding compiler version (1,2) [1]: **↓**
Do you want to install the HIPPI/BDS drivers? (y/n) [N]: **↓**
Do you want to upgrade the SCSI/FC RAID drivers? (y/n) [Y]: **↓**
Do you want to install the TP9400 RAID drivers? (y/n) [N]: **y ↓**
Do you want to install the Flexlm server on f2spg02? (y/n) [N]: **↓**
Do you want to install IrisConsole 2.0? (y/n) [N]: **↓**

Here is what you have selected for upgrade on f2spg02:
This information is based on the selections that are already
installed on f2spg02.

WARNING: While you may change any of the below selections from
(N)o to (Y)es, do NOT change any of the below
selections from (Y)es to (N)o.

IRIX 6.5 base operating system: YES (default)
IRIX 6.5 Overlay Version: 6.5.14
MIPSPro Compilers: Y (7.3.1.2m)
HiPPI 3.3.1/BDS 2.1: N
RAID 3.3: Y
TP9400 RAID: Y
FlexLM Server: N
IRISConsole 2.0: N

Modify choices, save and exit, or abort?
([m]odify/[s]ave/[a]bort): **s ↵**

Creating selections file for f2spg02.....done.

Profile is now complete.

You are ready to run the upgrade.sh script on f2spg02

Cleaning up...

```
=====

Inst> admin load sgidist:/data/dist/selections/hosts/f3acg01.sel
What is the network address of sgidist? 155.157.31.199
Connecting to sgidist ...
Connecting to sgidist ...
...
...

Install software from: [sgidist:/data/dist/ssh/ssh21] done
Connecting to sgidist ...
Connecting to sgidist ...
Importing selections from sgidist:/data/dist/selections/hosts/f3acg01.sel.

Inst> keep all

Inst> list i
No matches for "i" were found

Inst> install fresh

Inst> list i
View:      distribution
Status:    N=new, U=upgrade, S=same, D=downgrade, P=patch upgrade
Status:    A=installable patch, X=uninstallable patch
...
...

Inst> conflicts

patchSG0004464 (1279999906) is incompatible with your hardware.
```

This product is only suitable for the configuration:
CPUBOARD=IP19 CPUBOARD=IP25.
See the "hardware" help topic for more information.
1a. Do not install patchSG0004464 (1279999906)

patchSG0004448.eoe_sw.base (1279999904) is incompatible with
patchSG0004722.eoe_sw.base (1279999913)
2a. Do not install patchSG0004448.eoe_sw.base (1279999904)
2b. Do not install patchSG0004722.eoe_sw.base (1279999913)
2c. Open new distribution to resolve conflict

Resolve conflicts by typing "conflicts choice choice ..."
or try "help conflicts"

Inst> **conflicts 1a 2a**
No conflicts

Inst> **go**
Pre-installation check .. 3%
/var/sysgen/master.d/if_ipg not installed. See smart_config_handling
preferenc
...
...
Running exit-commands .. 91%
Checking dependencies .. 100% Done.
Calculating sizes .. 100% Done.
Installations and removals were successful.
You may continue with installations or quit now.

Inst> **quit**
Requickstarting ELF files (see rqsall(1)) .. 100% Done.
Automatically reconfiguring the operating system.
Ready to restart the system. Restart? { (y)es, (n)o, (sh)ell, (h)elp }: **n**

Inst> **r hippi**

Inst> **go**

Inst> **quit**
Automatically reconfiguring the operating system.
UX:ln: ERROR: /dev/lxvm/local - Function not implemented
UX:ln: ERROR: /dev/rlxvm/local - Function not implemented
UX:ln: ERROR: /dev/xvm/local - Function not implemented
UX:ln: ERROR: /dev/rxvm/local - Function not implemented
Ready to restart the system. Restart? { (y)es, (n)o, (sh)ell, (h)elp }: **y**

8) ** Restore modified files:

```
# mv /etc/hosts_{Challenge_hostname} /etc/hosts (edit IP address as
necessary)
# mv /etc/exports_{Challenge_hostname} /etc/exports
# mv /etc/sys_id_{Challenge_hostname} /etc/sys_id
# mv /etc/fstab_{Challenge_hostname} /etc/fstab (comment out RAID
devices, if necessary)
# cd /etc/config
```

```
# mv static-route.options_{Challenge_hostname} static-route.options
# rm netif.options_{Challenge_hostname}
```

9) ****IMPORTANT:** Before taking Challenge off-line, unmount all exported file systems from NFS clients.

10) Power down Origin 300, reconnect RAID devices from original Challenge, then power new Origin 300 back up. If connecting a Wyse terminal from old Challenge to new Origin 300, a different gender serial cable is required (9-pin female on Origin). The baud rate for the Origin console is 38400, as opposed to 9600 on the Challenge.

Amass hosts only:

Create a backup of Amass database:

```
# su - amass
p0drg01{amass}201: /usr/amass/bin/amassbackup -fv

Volume: 10512.750 Mbytes used, 40000.000 Mbytes total, is 26.28% full, need
4.250 Mbytes for partial backup
/usr/filesysdb/journal/dbv4jrn1.backup
Volume: 10517.000 Mbytes used, 40000.000 Mbytes total, is 26.29% full, need
258.750 Mbytes for full backup
/usr/filesysdb/sequence.t
/usr/filesysdb/apprec/filesv4.app
/usr/filesysdb/apprec/filesv4.apl
...
...
/usr/filesysdb/vgdv4.dbd
/usr/filesysdb/dbtmpkeyv4.dbd

p0drg01{amass}202: tar cvf /var/tmp/filesysdb.tar /filesysdb

/filesysdb/D3_Vols_deleted/402_D3 264 blocks
a /filesysdb/D3_Vols_deleted/403_D3 3 blocks
a /filesysdb/D3_Vols_deleted/typescript 4592 blocks
...
...
a /filesysdb/vols/vgdv4.vnote0.bak 32 blocks
a /filesysdb/vols/vgdv4.vol0 272 blocks

p0drg01{amass}207: /usr/amass/tools/killdaemons -f -t 0
p0drg01{amass}207: amass_atboot -d

Disabling AMASS at boot

p0drg01{amass}207:
```

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Appendix B. Sybase Transition Procedures

B.1 ASE 12.5 Installation Instructions (ECS Specific)

B.1.1 Preliminary Checklist for ASE 12.5

1. Please review the installation instructions prior to installing software.
2. Create Sybase account.
3. Make sure there is 800 MB of disk space for ASE 12.5.x and ebf10433.
4. Installation time for sybase approximately 1-2 hours.
5. Configuring sybase 3-4 hours.
6. Installing SQS 1 hour.
7. You need to know the port numbers to use when configuring the adaptive server, backup server and monitor server.
8. Verify permissions are set correctly in the sybase installation directory. This would be read, write and execute.
9. After unloading and installing, you will be executing command that are located in sybase125 directory.

Bourne(sh) - source SYBASE.sh

C(csh) - source SYBASE.csh

.

B.1.2 Unloading Adaptive Server Enterprise 12.5.x

Unloading Software from CD

1. Create the sybase125 directory:

```
#cd /sybasefs1
```

```
#mkdir /sybase125
```

Change the sybase ownership and group.

To unload from CD:

2. Insert the CD in the CD-ROM drive
3. Start the Studio Installer by typing:

```
# cd /CDROM
```

```
# ./install
```

4. Select the type of installation be performed.
 - Standard Install - installs the default componentsClick **Next**
5. Enter **the target directory** (Directory to unload into) and click **Next** to proceed.
6. The Summary screen displays every component that is installed by the Studio Installer, the disk space required for each component, and the available disk space.
7. If the target directory does not exist, the Studio Installer prompts you to create it.
Click **Yes** to proceed.

The Studio Installer installs the components on to the hard drive and displays a progress indicator.

Warning!

Do not interrupt the installation process. If you do, you must manually remove all of the Adaptive Server and related files, and restart the installation.

Sybase Software Asset Manager (SySAM)

If you install any components without the appropriate license information, only Adaptive Server 12.5, without licensed features, is enabled.

1. The Studio Installer prompts: "Do you have a Sybase Software Asset Management Certificate to register?"

Click **Yes**.

2. Enter information from the Sybase License Certificate for each Adaptive Server feature you have purchased. Entries are case sensitive.

Order Number: Enter your Sybase order number.

Feature Name: ASE_SERVER

Feature Count: Enter your license count number.

Software Version: 12.0

Authorization Code: Enter the license key for the purchased feature.

The installer records the information for the current feature in the license file and prompts you to enter information for an additional feature.

See Chapter 3, "Sybase Software Asset Management (SySAM)" in the installation manual for detailed information about using the license manager.

3. Click **Continue Install** after you have entered information from all of the Sybase License Certificates you have purchased. The installer records all license information and prompts you to configure the components you have installed.

If you encounter problems, check the installation log file to see a record of the installation process. The file is located in \$SYBASE/Installer.log.

4. When the Studio Installer has completed the installation process, it asks if you want to configure the newly installed products and immediately launches the configuration utility.

select No

B.1.3 Apply ebf10433 to Sybase 12.5

1. Create a directory which to download the SWR file (The following example uses tmp, but you can place the tar file where ever there is space available on your server and remove after the upgrade all systems are complete.)

```
# cd /tmp
# mkdir download
```

2. Retrieve tar files from your web location and copy to the down load directory.

3. Uncompress the downloaded file by typing:

```
# gunzip -S .tgz <filename>
```

4. Extract the file by typing:

```
# gnutar -xf <filename>
```

5. Copy the contents of the download directory to the sybase125 directory.

```
# cd /sybaseefs1/sybase125
# cp -R /tmp/download/ebf10433/Server/* .
```

B.1.4 Installing Adaptive Server Enterprise 12.5

1. Build the Sybase servers.

Source the sybase environment variable and set your display.

```
# assecfg& (This calls srvbuild)
```

The ASE setup and configuration screen is displayed.

Select configure a new server

Click the check hosts for the types of server to create and provide names for these servers

Server Type	Server Name
<input type="checkbox"/> Adaptive Server	The Name of your adaptive server
<input type="checkbox"/> Backup Server	The Name of your backup server
<input type="checkbox"/> Monitor Server	The Name of your monitor server
<input type="checkbox"/> XP Server	Not used

2. Select Adaptive Server, Backup Server and Monitor Server.

- The Adaptive Server Installation Screen is displayed first.
- Provide the name of the Adaptive Server

Adaptive Server Installation Screen displays the following fields:

Master device path	/sybasefs1/devices/master_dev.dat
Master device size (MB)	200MB
Master database size (MB)	100MB
Sybsystemprocs device path	/sybasefs1/devices/sysprocsdev.dat
Sybsystemprocs device size (MB)	200MB
Sybsystemprocs database size (MB)	125MB
Error Log Path	Enter path of log file

Interfaces File Entry, specify **port number** from **previous installation**

If the information is correct then click ok, the Backup Server Screen is displayed.

To change information click on **go back**

The Backup Server Screen displays the following fields:

Related Adaptive Server name	The adaptive server that will use this backup server Note: This field may not appear if created in the same srvbuild session as the adaptive server
Adaptive Server SA user name	sa
Adaptive Server SA password	Password for sa
Error Log Path	Enter path of log file
Tape Configuration file	Leave blank
Language	Leave blank
Character Set	Leave blank
Maximum number of network connections	Accept default
Maximum number of server connections	Accept default

Interfaces File Entry, specify port number from previous installation.

The Monitor Server Screen displays the following fields:

Related Adaptive Server name	The adaptive server that will use this backup server Note: This field may not appear if created in the same srvbuild session as the adaptive server
Adaptive Server SA user name	sa
Adaptive Server SA password	Password for sa
Maximum number of connections	5
Error log path:	<Enter path of log file>
Configuration file path:	Accept default
Shared memory directory:	Accept default
Port number	<from previous installation>

At this point the adaptive server, backup server and monitor information should have been entered.

Click **Build Server!** To create servers specified.

If installation is successful the following message is displayed:

Server n0acg01_srvr was successfully created.

Done.

B.1.4.1 Post Installation Adaptive Server Enterprise 12.5.x

Note: The next few steps will require the ASE Servers to be recycled several times at various points. The intent is to identify problems easily in the event they may occur.

1. To verify servers installed are running:

```
# isql -Usa -P -S<sybase servername>
```

```
> select @@version  
> go
```

The following is displayed:

```
-----  
Adaptive Server Enterprise/12.5.0.1/SWR 10433 IR/P/SGI/IRIX  
6.5/rel12501/1776/64-bit/FBO/Tue Feb 26 05:43:59 2002
```

```
(1 row affected)
```

2. Set the Sybase System Administrator Password:

```
# isql -Usa -P -S<sybase servername>
```

```
> sp_password null, new_password  
> go
```

3. Configure Sybase (See the Sybase Configuration Parameters Section).
4. Create devices (See the Create Device Section).
5. Create databases (See the Database Create Section).
6. Create the following logins:
dpl_role sdsrv_role nbsub_role mss_role
oms_role stmgt_role css_role ingest_role
7. Change the database ownership of the corresponding databases with the dbo logins created above by using sp_changedbowner.
8. Set user database options to "select into", dbccdb get "trunc log" only.
9. Increase the size of tempdb to 4000.
 > alter database tempdb on tempdb = 4000
 > go
10. Run the icg2acg script to load databases, drop and add users, thresholds and set permissions.
11. Configure Dbccdb (See the Install and Configure Dbccdb Section).
12. Install and configure SQS (See Installing SQS Section).
13. Install and Configure Auditing (See Installing and Configuring Auditing Section).
14. Configure for Drilldown (See the Configuring for Drilldown processing).
15. Configure Named Cache (See the Configuring Named Cache Section).

16. Backup database using the icg2acg script. This will dump the databases faster than the backup scripts. The system databases will need to be dumped manually, as this script does not handle those databases.
17. Configure nightly dump scripts then let backups run as usual.

Sybase Configuration Parameters

Parameter	Value
cpu grace time	1500
event buffers per engine	5000
max sql text monitored	1024
max memory	3500000 (7GB)
max online engines	4
number of devices	30
number of engines at startup	4
number of locks	200000
number of open databases	30
number of open indexes	3000
number of open objects	8000
number of remote connections	100
number of remote logins	100
number of user connections	1100
number of worker processes	2
procedure cache size	500000 (1GB)
license information	0

Log into the ASE to set the above parameters, the syntax is as follows:

```
> sp_configure "parameter name", nn  
> go
```

For example:

```
> sp_configure "cpu grace time", 1500  
> go
```

B.1.5 Installing and Configuring Dbccdb

Log into the ASE Server, then follow the steps below:

```
> sp_plan_dbccdb
> go
```

Recommended size for dbccdb database is 1910MB (data = 1908MB, log = 2MB).
(This will be ignored since the dbccdb has already been create to allow for future growth).

dbccdb database already exists with size 2500MB.

Recommended values for workspace size, cache size and process count are:

dbname	scan ws	text ws	cache	Process Count
master	624K	160K	640K	1
tempdb	18464K	4624K	4618K	2
model	80K	48K	640K	1
sybsystemprocs	1488K	384K	640K	1
EcDsScienceDataServer1_TS1	29504K	7392K	7380K	3
EcDsScienceDataServer1	142M	35M	35M	6
stmgtdbl_TS1	7376K	1856K	2560K	4
stmgtdbl	29792K	7456K	7450K	4
EcOmDb	7376K	1856K	1847K	2
EcNbDb	9232K	2320K	2311K	2
EcNbDb_TS1	2160K	544K	1280K	2
DataPool	42M	10M	10M	2
DataPool_TS1	27040K	6768K	6762K	2
EcOmDb_TS1	3696K	928K	1280K	2
sybsystemdb	80K	48K	640K	1
mss_acct_db	14752K	3696K	3690K	2
mss_acct_db_TS1	3696K	928K	1280K	2
SDSRV_TEST	142M	35M	35M	2
dbccdb	14752K	3696K	3690K	2

```
(return status = 0)
1>
```

The LARGEST:

dbname	scan ws	text ws	cache	process count
EcDsScienceDataServer1	142M	35M	35M	6

GOING TO BE:

EcDsScienceDataServer1

142M

35M

35M

2

Even though the plan recommends six worker processors, due to the increased processing speed, two worker processors is sufficient.

STEPS ARE LISTED BELOW:

=====

Since the dbcc database was created in a previous section this step can be skipped. In the event the database had to be dropped and recreated this would be the process for recreating the dbccdb.

```
> sp_plan_dbccdb
> go
> create database dbccdb on dbcc_data=2000
    log on dbcc_log=500
> go
> online database dbccdb
> go
> sp_dboption dbccdb, "trunc log on chkpt", true
> go
=====
```

Add segments for scan and text workspaces to the dbcc data device:

```
> use dbccdb
> go
> sp_addsegment scanseg, dbccdb, dbcc_data
> go
> sp_addsegment textseg, dbccdb, dbcc_data
> go
```

Install dbcc stored procedures: This will create the tables for dbccdb, initialize the dbcc_types, and install dbcc stored procedures.

```
isql -Usa -S n0acg01_srvr -i /usr/ecs/OPS/COTS/sybase/ASE-
12_5/scripts/installdbccdb
```

dbname	scan ws	text ws	cache	process count
EcDsScienceDataServer1	142M	35M	35M	6

Create Workspaces based on the largest database.

```
> exec sp_dbcc_createws dbccdb, scanseg, scan_ws, scan, "142M"
> go
> exec sp_dbcc_createws dbccdb, textseg, text_ws, text, "35M"
> go
```

Create dbcc_cache Named Cache:

NOTE: DOUBLE the estimated cache (Normally double but will triple to allow For growth)

```
> exec sp_cacheconfig "dbcc_cache","105M" (35*3)
> go
```

Check the ASE parameter, number of worker processes then modify according To sp_plan_dbccdb

```
> use master
> go
> sp_configure "number of worker processes"
> go
```

-- REBOOT: shutdown and restart ASE

-- See ASE 12.5 SA Guide Volume 2 Page 609:
-- You must restart ASE after creating caches in order to bind
-- objects to them. Bindings take effect immediately and do NOT
-- require a restart.

-- Bind Cache

```
> use master
> go
> sp_dboption dbccdb, single, true
> go
> use dbccdb
> go
> checkpoint
> go
> use master
> go
> sp_bindcache dbcc_cache, dbccdb
> go
> sp_dboption dbccdb, single, false
> go
> use dbccdb
> go
> checkpoint
> go
```

Configure 16K buffer pools which is 90% of dbcc_name cache

-- 16K Pool 90% of 105M = 95M

```
> use dbccdb
> go
> sp_poolconfig "dbcc_cache", "95M", "16K"
> go
```

=====

Configure each target database that will have the dbcc checkstorage performed Against it.

=====

```
> exec sp_dbcc_updateconfig master,"max worker processes","2"
> exec sp_dbcc_updateconfig master,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig master,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig master,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig sybsystemdb,"max worker processes","2"
> exec sp_dbcc_updateconfig sybsystemdb,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig sybsystemdb,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig sybsystemdb,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig sybsystemprocs,"max worker processes","2"
> exec sp_dbcc_updateconfig sybsystemprocs,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig sybsystemprocs,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig sybsystemprocs,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig DataPool,"max worker processes","2"
> exec sp_dbcc_updateconfig DataPool,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig DataPool,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig DataPool,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig DataPool_TS1,"max worker processes","2"
> exec sp_dbcc_updateconfig DataPool_TS1,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig DataPool_TS1,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig DataPool_TS1,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig EcDsScienceDataServer1,"max worker processes","2"
> exec sp_dbcc_updateconfig EcDsScienceDataServer1,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcDsScienceDataServer1,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig EcDsScienceDataServer1,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig EcDsScienceDataServer1_TS1,"max worker
processes","3"
> exec sp_dbcc_updateconfig EcDsScienceDataServer1_TS1,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcDsScienceDataServer1_TS1,"scan workspace",
scan_ws
> exec sp_dbcc_updateconfig EcDsScienceDataServer1_TS1,"text workspace",
text_ws
> go
> exec sp_dbcc_updateconfig EcNbDb,"max worker processes","2"
> exec sp_dbcc_updateconfig EcNbDb,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcNbDb,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig EcNbDb,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig EcNbDb_TS1,"max worker processes","2"
> exec sp_dbcc_updateconfig EcNbDb_TS1,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcNbDb_TS1,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig EcNbDb_TS1,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig EcOmDb,"max worker processes","2"
```



```

> exec sp_dbcc_updateconfig EcOmDb,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcOmDb,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig EcOmDb,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig EcOmDb_TS1,"max worker processes","2"
> exec sp_dbcc_updateconfig EcOmDb_TS1,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcOmDb_TS1,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig EcOmDb_TS1,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig mss_acct_db,"max worker processes","2"
> exec sp_dbcc_updateconfig mss_acct_db,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig mss_acct_db,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig mss_acct_db,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig mss_acct_db_TS1,"max worker processes","2"
> exec sp_dbcc_updateconfig mss_acct_db_TS1,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig mss_acct_db_TS1,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig mss_acct_db_TS1,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig stmgtdbl,"max worker processes","2"
> exec sp_dbcc_updateconfig stmgtdbl,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig stmgtdbl,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig stmgtdbl,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig stmgtdbl_TS1,"max worker processes","2"
> exec sp_dbcc_updateconfig stmgtdbl_TS1,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig stmgtdbl_TS1,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig stmgtdbl_TS1,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig EcCsNameServer,"max worker processes","2"
> exec sp_dbcc_updateconfig EcCsNameServer,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcCsNameServer,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig EcCsNameServer,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig EcCsNameServer_TS1,"max worker processes","2"
> exec sp_dbcc_updateconfig EcCsNameServer_TS1,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcCsNameServer_TS1,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig EcCsNameServer_TS1,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig EcCsRegistry,"max worker processes","2"
> exec sp_dbcc_updateconfig EcCsRegistry,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcCsRegistry,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig EcCsRegistry,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig EcCsRegistry_TS1,"max worker processes","2"
> exec sp_dbcc_updateconfig EcCsRegistry_TS1,"dbcc named
cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig EcCsRegistry_TS1,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig EcCsRegistry_TS1,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig Ingest,"max worker processes","2"
> exec sp_dbcc_updateconfig Ingest,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig Ingest,"scan workspace", scan_ws

```

```

> exec sp_dbcc_updateconfig Ingest,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig Ingest_TS1,"max worker processes","2"
> exec sp_dbcc_updateconfig Ingest_TS1,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig Ingest_TS1,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig Ingest_TS1,"text workspace", text_ws
> go
> exec sp_dbcc_updateconfig SDSRV_TEST,"max worker processes","2"
> exec sp_dbcc_updateconfig SDSRV_TEST,"dbcc named cache","dbcc_cache","105M"
> exec sp_dbcc_updateconfig SDSRV_TEST,"scan workspace", scan_ws
> exec sp_dbcc_updateconfig SDSRV_TEST,"text workspace", text_ws
> go

```

=====

To see what databases have been configured run the dbcc config Report.

=====

```

> use dbccdb
> go
> exec sp_dbcc_configreport
> go

```

=====

To test dbcc checkstorage on a single database

=====

```

> use DataPool
> go
> dbcc checkstorage
> go

```

Note: May or may not see errors.

=====

-- To run dbcc fault report after dbcc checkstorage

=====

```

> use dbccdb
> go
> exec sp_dbcc_faultreport "long", "DataPool"
> go

```

B.1.6 Configuring for DrillDown Processing

NSIDC Implementation:

Shutdown all modes and any application that access Sybase.

Add additional sybase engines

```

> sp_configure "max online engine", 5
> go

```

Change the number of engines at startup

```

> sp_configure "number of engine at startup", 5
> go

```

Unbind tempdb cache

```
> sp_unbindcache_all "tempdb_cache"  
> go
```

Reconfigure tempdb and DataPools cache with partition

```
> sp_cacheconfig "tempdb_cache", "512M", "cache_partition=4"  
> go  
> sp_cacheconfig "dp_cache", "cache_partition=4"  
> go
```

Shutdown Sybase and Bring up in single user mode.

Bind tempdb Cache

```
> sp_bindcache "tempdb_cache", tempdb  
> go
```

Remove 16K buffer and add 8K Buffer Pool for Data Pool Cache

```
> sp_poolconfig dp_cache , "0", "16K"  
> go  
> sp_poolconfig dp_cache , "512M", "8K"  
> go
```

Verify Change

```
> sp_cacheconfig dp_cache  
> go
```

Restart Sybase in Multi-User Mode

Create New Engine Group for ECS Processing

```
> exec sp_addengine 0, ecs_engroup  
> exec sp_addengine 1, ecs_engroup  
> exec sp_addengine 2, ecs_engroup  
> exec sp_addengine 3, ecs_engroup  
> go
```

Create New Engine Group for Drill Down Processing

```
> exec sp_addengine 4, drilld_engrp  
> go
```

Display Information about the execution objects

```
> exec sp_showcontrolinfo  
> go
```

Create two (2) execution classes, ecs and drill down

```
> exec sp_addexeclass ecs_execlss, MEDIUM, 0, ecs_engroup  
> exec sp_addexeclass drilld_execlss, MEDIUM, 0, drilld_engrp  
> go
```

Bind drill down logins to the drilld_execlss

```
> exec sp_bindexeclass EcDIWebAccess, LG, NULL, drilld_execlss  
> exec sp_bindexeclass EcDIWebRollupStats, LG, NULL, drilld_execlss
```

```
> go
```

Display info about execution classes

```
> exec sp_showexeclass
```

```
> go
```

Bind ECS application logins to the ecs_execlass

Issue the following sql command to list syslogins:

```
> select name from syslogins
```

```
> go
```

The names displayed from this select statement are to be used below:

```
exec sp_bindexeclass <login name>, LG, NULL, ecs_execlass
```

```
i.e. exec sp_bindexeclass sqs_sa_1, LG, NULL, ecs_execlass
```

Display information about execution classes after all logins have been bound to the ecs_execlass.

```
> exec sp_showexeclass
```

```
> go
```

Under heavy load, another series of sp_sysmon runs may be required, to determine if additional tuning is necessary.

B.1.7 Installing and Setting up Auditing

1. The auditing devices and database should have been created in a previous step. If not issue the following commands:

```
disk init name = "auditdev", physname = "/sybasefs4/devices/auditdev.dat", size = "700M"
```

```
disk init name="auditlogdev", physname = "/sybasefs4/devices/auditlog.dat", size = "100M"
```

```
create database sybsecurity on auditdev = 700 log on auditlog = 100
```

2. Use the isql to execute the installsecurity script:

```
# cd $SYBASE/ASE-12_5/scripts
```

```
# setenv DSQUERY server_name
```

```
isql -Usa -Ppassword -Sserver_name < installsecurity
```

3. Shut down and restart Adaptive Server.
4. Auditing is only enabled when the need arises.

Sybase Devices

LOGICAL NAME	SIZE (MB)	PHYSICAL NAME	dsync
auditdev	700	/sybasefs4/devices/auditdev.dat	off
auditlog	100	/sybasefs4/devices/auditlog.dat	off
dbcc_data	2000	/sybasefs4/devices/dbcc_data.dat	off
dbcc_log	1000	/sybasefs4/devices/dbcc_log.dat	off
d_master	200	/sybasefs1/devices/master_dev.dat	ON
di_dev1	32000	/dev/rxlv/di_dev1	off
di_dev2	32000	/dev/rxlv/di_dev2	off
di_dev3	32000	/dev/rxlv/di_dev3	off
di_dev4	32000	/dev/rxlv/di_dev4	off
di_dev5	32000	/dev/rxlv/di_dev5	off
log_dev1	32000	/dev/rxlv/log_dev1	off
log_dev2	32000	/dev/rxlv/log_dev2	off
nacg	8000	/sybasefs2/devices/nacg.dat	off
nicg	4000	/sybasefs2/devices/nicg.dat	off
nsdsrv	10000	/sybasefs2/devices/nsdsrv.dat	off
nstmgt	4000	/sybasefs2/devices/nstmgt.dat	off
nlog	8000	/sybasefs1/devices/nlog.dat	off
sysprocsdev	200	/sybasefs1/devices/sysprocsdev.dat	off
tempdb_dev	6000	/sybasefs3/devices/tempdb_dev.dat	off

To set the value of dsync the syntax is as follows:

```
> sp_deviceattr "device logical name", "dsync", "false"
> go
```

For example:

```
> sp_deviceattr "sysprocsdev", "dsync", "false"
```

NOTE: Additional Partition Information: (This must be initialized prior to creating Sybase devices).

Additional Partition Information

	Size (GB)		
VOL di_dev1	32		Raw
VOL di_dev2	32		Raw
VOL di_dev3	32		Raw
VOL di_dev4	32		Raw
VOL di_dev5	32		Raw
VOL log_dev1	32		Raw
VOL log_dev2	32		Raw
VOL sybdump1	32		FS
VOL sybdump2	32		FS
VOL sybdump3	32		FS
VOL sybdump4	32		FS
VOL sybdump5	32		FS
VOL sybdump6	32		FS
VOL sybdump7	32		FS
VOL sybdump8	32		FS
VOL sybasefs1	32		FS
VOL sybasefs2	32		FS
VOL sybasefs3	32		FS
VOL sybasefs4	32		FS

Database Create Commands

Database create commands:
=====

```

> create database DataPool on di_dev4=3000 log on log_dev2=500
> go
> create database DataPool_TS1 on nacg=500 log on nlog=100,nlog=500
> go
> alter database DataPool_TS1 on nacg=300, nacg=800
> go
> create database EcDsScienceDataServer1
    on di_dev1=2000, di_dev1=2000, di_dev1=1200
    log on log_dev1=700
> go
> alter database EcDsScienceDataServer1
    on di_dev1=2000, di_dev1=4000
> go
> create database EcDsScienceDataServer1_TS1
    on nsdsrv=1600, nsdsrv=400 LOG ON nlog=400
> go
> create database EcNbDb on di_dev4=500 log on log_dev2=250
> go
> create database EcNbDb_TS1 on nacg=125 log on nlog=50
> go
> create database EcOmDb on di_dev4=500 log on log_dev2=100
> go
> create database EcOmDb_TS1 on nacg=200 LOG ON nlog=100
> go
> create database mss_acct_db on di_dev4=800 log on log_dev2=400
> go
> create database mss_acct_db_TS1 on nacg=200 log on nlog=100
> go
> create database stmgtdb1
    on di_dev3=600, di_dev3=300 log on log_dev2=300
> go
> alter database stmgtdb1
    on di_dev3=224, di_dev3=100 log on log_dev2=100
> go
> alter database stmgtdb1 on di_dev3=500, di_dev3=300
> go
> create database stmgtdb1_TS1 on nstmgt=200, nstmgt=100
    log on nlog=100, nlog=200
> go
> create database EcCsNameServer on di_dev5=20 log on log_dev1=10
> go
> create database EcCsNameServer_TS1 on nicg=20 log on nlog=10
> go
> create database EcCsRegistry on di_dev5=300 log on log_dev1=150
> go
> create database EcCsRegistry_TS1 on nicg=300 log on nlog=150
> go
> create database Ingest on di_dev5=1199, di_dev5=599
    log on log_dev1=599
> go
> create database Ingest_TS1 on nicg=400, nicg=200
    log on nlog=200
> go
> create database dbccdb on dbcc_data=2000 log on dbcc_log=500
> go
> create database sybsecurity on auditdev=700 log on auditlog=100
> go

```

B.1.8 Configuring Named Cache

Configure the following named cache:

NOTE: tempdbcache and dp_cache should have been created in a previous step, if so skip the sp_config for tempdbcache and dp_cache. If not, then create using the following:

```
> sp_cacheconfig "tempdbcache", "512M", "cache_partition=4"
> go
> sp_cacheconfig "dp_cache", "512M", "cache_partition=4"
> go
> sp_cacheconfig "nblog_cache", "16M", logonly
> go
> sp_cacheconfig "sdsrv_log", "8M", logonly
> go
> sp_cacheconfig "sdsrvsys_cache", "6M"
> go
> sp_cacheconfig "stmgtGR_cache", "5M"
> go
> sp_cacheconfig "stmgt_GenericRequest", "100M"
> go
> sp_cacheconfig "stmgtdb1_log", "32M", logonly
> go
> sp_cacheconfig "stmgtsys_cache", "6M"
> go
```

The ASE Server must be rebooted for the change to take effect.

Bind cache

```
> sp_bindcache "dp_cache", "DataPool_TS1"
> go
> sp_bindcache "nblog_cache", "EcNbDb_TS1", "syslogs"
> go
> sp_bindcache sdsrv_log, EcDsScienceDataServer1_TS1, syslogs
> go
> sp_bindcache stmgtdb1_log, stmgtdb1_TS1, syslogs
> go
> sp_bindcache sdsrvsys_cache, stmgtdb1_TS1, syslogs
> go
> sp_bindcache stmgtGR_cache, stmgtdb1_TS1, DsStTempGRsave
> go
```



```

> sp_bindcache stmgmt_GenericRequest, stmgtdb1_TS1, DsStGenericRequest
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, sysobjects
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, sysindexes
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, syscolumns
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, systypes
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, sysprotects
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, sysusers
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, sysreferences
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, sysconstraints
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, systabstats
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1_TS1, sysstatistics
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, sysobjects
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, sysindexes
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, syscolumns
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, systypes
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, sysprotects
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, sysusers
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, sysreferences
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, sysconstraints
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, systabstats
> go
> sp_bindcache sdsrvsys_cache, EcDsScienceDataServer1, sysstatistics
> go
> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, sysobjects
> go
> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, sysindexes
> go

```

```

> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, syscolumns
> go
> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, systypes
> go
> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, sysprotects
> go
> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, sysusers
> go
> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, sysreferences
> go
> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, sysconstraints
> go
> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, systabstats
> go
> sp_bindcache stmgtsys_cache, stmgtdb1_TS1, sysstatistics
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, sysobjects
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, sysindexes
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, syscolumns
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, systypes
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, sysprotects
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, sysusers
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, sysreferences
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, sysconstraints
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, systabstats
> go
> sp_bindcache stmgtsys_cache, stmgtdb1, sysstatistics
> go

```

Set the size of Buffer Pool

```

> sp_poolconfig dp_cache, "100M", "8K"
> go
> sp_poolconfig nblog_cache, "14M", "4K"
> go

```

```

> sp_poolconfig sdsrv_log, "6M", "4K"
> go
> sp_poolconfig stmgtdb1_log, "6M", "4K"
> go
> sp_poolconfig tempdbcache, "125M", "8K"
> go

```

=====

In the event cache needs to be deleted the commands follows:

=====

```

> sp_unbindcache_all "Nb_log"
> go
> sp_unbindcache_all "DataPool"
> go
> sp_cacheconfig Nb_log, "0"
> go
> sp_cacheconfig DataPool, "0"
> go

```

=====

To Display cache that has been created

=====

```

> sp_cacheconfig
> go

```

Output similar to the following is displayed:

```

> Cache Name           Status  Type   Config Value  Run Value
> -----
> dbcc_cache           Active  Mixed   566.00 Mb     566.00 Mb
> default data cache   Active  Default 0.00 Mb       8.00 Mb
>
> -----
>                               Total   566.00 Mb     574.00 Mb
>

```

=====

```

> Cache: dbcc_cache, Status: Active, Type: Mixed
>   Config Size: 566.00 Mb, Run Size: 566.00 Mb
>   Config Replacement: strict LRU, Run Replacement: strict LRU
>   Config Partition:      1, Run Partition:      1
> IO Size  Wash Size Config Size Run Size  APF Percent
> -----
>   2 Kb 11468 Kb   0.00 Mb   56.00 Mb   10
>  16 Kb 61440 Kb  510.00 Mb  510.00 Mb   10
>

```

=====

```

> Cache: default data cache, Status: Active, Type: Default
>   Config Size: 0.00 Mb, Run Size: 8.00 Mb
>   Config Replacement: strict LRU, Run Replacement: strict LRU
>   Config Partition:      1, Run Partition:      1
> IO Size  Wash Size Config Size  Run Size   APF Percent
> -----
>   2 Kb  1638 Kb    0.00 Mb    8.00 Mb    10
> (return status = 0)
>

```

B.1.9 Installing SQS Server

Prerequisites:

This installation of SQS will take approximately 30 minutes.

These instructions were written under the assumption that:

- Sybase Adaptive Server Enterprise 12.5 has been installed and configured.
- Sybase was installed using a Unix account 'sybase'. This account is used for the installation procedure.
- The ECS modes using the databases being upgraded have been shutdown (Refer to site procedures).
- The installation tar file has been retrieved from SMC and placed in a directory **<distribution dir>**.
- Installation of SQS version 3.4.2.9 requires approximately 8 Mb of disk space.
- **SQS License key should be obtained prior to installation of SQS.**
- Prior to putting SQS server into production. Make sure the following configuration changes have been made:

B.1.9.1 Installation Instructions

1. Log in as Sybase.
2. Obtain the SQS tar file sqs3429SgiSyb12_5.tar.
3. Create an sqs_342 target directory under /usr/ecs/OPS/COTS:


```
#cd /usr/ecs/OPS/COTS
```

```
#mkdir sqs_342
```
4. Copy the sqs tar file into the sqs_342 directory and type the following:

```
# tar -xvf sqs3429SgiSyb12_5.tar
```

The following is a short list of what will be displayed on the screen:

```
x README, 4916 bytes, 10 blocks
x ReleaseNotes.htm, 16007 bytes, 32 blocks
x bin/SQS2Shape, 269752 bytes, 527 blocks
x bin/sqsbcp, 2125224 bytes, 4151 blocks
x bin/sqsserver, 3023176 bytes, 5905 blocks
x doc/sqs2shape/SQS2Shape.doc, 40448 bytes, 79 blocks
x doc/sqs2shape/SQS2Shape.htm, 39806 bytes, 78 blocks
x doc/sqs2shape/SQS2Shape.txt, 16462 bytes, 33 blocks
x doc/sqsInstall/install.doc, 60928 bytes, 119 blocks
```

B.1.9.2 Post Installation for SQS 3.4.2.9

1. cd into sqs_342/license directory add the license key received from EDS.
vi sqs_license.dat
2. Add the existing SQS 342 server names in the local sybase interfaces.
3. Configure four SQS instances.
4. Start SQS server.

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Appendix C. ICG to ACG Script

I. INTRODUCTION

Menu-driven scripts for combining ACG/ICG databases:

- Check if the databases are accessible
- Add logins
- Test logins
- Add groups
- Add users
- Drop users
- Grant permissions
- Dump databases
- Load databases
- Drop thresholds
- Add thresholds
- Check dbcc

After database dumps are loaded to another ASE, the users on each database need to be dropped and added, and the permissions need to be granted for those users are not in the groups. The thresholds need to be updated. Database consistency needs to be checked.

II. Scripts and Configuration Files

The scripts and configuration files are located in
/usr/ecs/OPS/CUSTOM/dbms/COM/DBAdmin/icg2acg directory

icg2acg main driver

db_list list of databases

*db_list_larc (example for LARC , OPS/TS1/TS2 modes)

*db_list_nsidc (example for NSIDC, which is for OPS/TS1 modes)

*db_list_vatc (example for OPS/TS1/TS2 modes)

The Korn shells below are used to grant permissions for
the databases: DataPool, Ingest, MSS, NameServer,
Order Manager, Registry, SDSRV, Spatial Subscription,
Storage Management

grant_dpl korn shell to grant permissions

grant_ingest

grant_mss

grant_name

grant_oms

grant_registry

grant_sdsrv

grant_sss

grant_stmgt

drop_thresholds korn shell to drop thresholds

drop_thresholds.6070 korn shell to drop thresholds for 60 % (logwarning)
 70% 85% (logdump)

```

drop_thresholds.8085      korn shell to drop thresholds for 80 % (logwarning)
                          85% 90% (logdump)

update_thresholds          korn shell to drop/add thresholds for 80 %
(logwarning)
                          85% 90% (logdump)
update_thresholds.6070    korn shell to drop/add thresholds for 60 %
(logwarning)
                          70% 85% (logdump)
update_thresholds.8085    korn shell to drop/add thresholds for 80 %
(logwarning)
                          85% 90% (logdump)

groups_list                list of groups

logins_list                list of logins
*logins_list.anonymous    list of logins with anonymous login

stripes_list               list of dump database commands using ASE 12.5 compress
                          option

*stripes_list_nsidc        (example for nsidc, which is for OPS/TS1 modes)
*stripes_list_nsidc_testing_in_PVC
                          (example for testing_n0acg01 in PVC , which is for OPS/TS1 modes)
*stripes_list_pvc          (example for pvc, which is for OPS/TS1/TS2 modes)
*stripes_list_vatc         (example for vatc, which is for OPS/TS1/TS2 modes)

users_list                 list of users
*users_list.anonymous     list of users with anonymous user

```

NOTE: Those marked with * are examples and NOT required.

III. Customization of Scripts and Configuration Files

The db_list file needs to be edited using one of the examples based upon the environment.

The dbo logins: dpl_role, sdsrv_role, nbsub_role, oms_role, stmgt_role, mss_role, css_role, and ingest_role need to be created manually.

The groups_list, logins_list, and users_list need to be edited if any DAAC unique extension exists because these lists only contain the groups, users, and logins in the baseline (in ClearCase).

The stripes_list file needs to be edited using one of the examples based upon the environment.

IV. How to Run the Scripts

From UNIX prompt, type icg2acg, the usage with examples will be displayed.

```
./icg2acg
```

```
Usage: ./icg2acg MODE  TYPE  DBNAME  SERVER  USERNAME
```


where MODE = [ALL|OPS|TS1|TS2]

TYPE = [ACG|ICG|ALL]

DBNAME = [DB_NAME|ALL]

SERVER = [ASE_NAME]

USERNAME

Example 1: ./icg2acg ALL ACG ALL tlicg03_srvr sa
Example 2: ./icg2acg ALL ICG ALL tlicg03_srvr sa
Example 3: ./icg2acg ALL ALL ALL tlicg03_srvr sa
Example 4: ./icg2acg TS1 ACG ALL tlicg03_srvr sa
Example 5: ./icg2acg TS1 ICG ALL tlicg03_srvr sa
Example 6: ./icg2acg TS1 ALL ALL tlicg03_srvr sa
Example 7: ./icg2acg OPS ACG ALL tlicg03_srvr sa
Example 8: ./icg2acg OPS ICG ALL tlicg03_srvr sa
Example 9: ./icg2acg OPS ALL ALL tlicg03_srvr sa

Type the icg2acg with valid arguments, and enter the correct password,
the main menu will be displayed:

=====

Main Menu (Running icg2acg)

=====

1 - check_db
2 - add_login
3 - drop_user
4 - add_user
5 - dump_db
6 - load_db and online database
7 - list_user(s)
8 - test_login
10 - list_group
11 - add_group
12 - grant_perms
14 - drop_thresh (sp_dropthreshold and drop logdump, logwarning,
datawarning)
15 - list_thresh (sp_helpthreshold and sp_helprotect logdump, logwarning,
datawarning)
16 - add_thresh (sp_addthreshold and add logdump, logwarning, datawarning)
17 - dbcc_check
99 - exit

<databases_list>:
EcCsNameServer
EcCsNameServer_TS1
EcCsNameServer_TS2
EcCsRegistry
EcCsRegistry_TS1

EcCsRegistry_TS2
Ingest
Ingest_TS1
Ingest_TS2

Which task?

The <databases_list> contains a list of databases, which are selected based upon the MODE, TYPE, and DBNAME arguments in the command you just entered. If the DBNAME is "ALL", all the subsets selected by the MODE and TYPE will be included.

A typical usage is as follows,

Either use the daily dumps or the dump_db in this menu and copy the dumps to where the new ACG server disks.

The dbo logins: dpl_role, sdsrv_role, nbsub_role, oms_role, stmgmt_role, mss_role, css_role, and ingest_role need to be created manually.

Create logins using the add_login in the menu.

Create DAAC unique and sqs_sa logins.

Load the dumps to the databases.

Drop thresholds to each database using the drop_thresh in the menu.

Drop users to each database using the drop_user in the menu.

Add groups to each database using the add_group in the menu.

Add users to each database using the add_user in the menu.

Grant permissions to each database using the grant_perms in the menu.

Update thresholds to each database using the add_thresh in the menu.

Configure dbccdb.

Check dbcc to each database using the dbcc_check in the menu.

The test_login, list_user, list_group, and list_thresh can be run anytime.